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المراجعة رقم (1)

الترم الثانى










Second term Questions Bank



Question 01 — Choose the correct answer

1. The Sun appears as it moves from ....to ....
   (a) south - north (b) west - east (c) east - west (d) north - south
2. The solar system consists of some...............revolve around...............
   (a) Sun - planets (b) moons - planet (c) planets -Sun (d) planets - moon
3. The fastest planet revolves around the sun is..................
   (a) the Sun (b) Earth (c) Jupiter (d) the moon
4. The sun and other stars are made up of...............
   (a) hot solids (b) cold solids (c) hot gases (d) cold liquids
5. At the noon, the Sun appears in the .... in the sky.
   (a) east (b) west (c) left (d) center
6. The imaginary line that passes through Earth's center is called...............
   (a) the day (b) the axis (c) the night (d) the pole
7. It is the orbiting of an object around another object ....
   (a) rotation (b) spinning (c) revolution (d) gravity
8. The group of stars that make a certain shape in the sky is called.........
   (a) wetland (b) biosphere (c) constellation (d) gravity
9. Prevent developing of Ras Mohamed Protectorate is considered ....
   (a) preservation (b) pollution (c) sustainability (d) consumption
10. .... gives heat and light.
    (a) Stars (b) Moons (c) Plants (d) Satellites
11. The moon phase in which a small part is illuminated is called..................
    (a) new moon (b) crescent (c) gibbous (d) full moon
12. The star that is present in our solar system is............
    (a) the moon (b) the Sun (c) Earth (d) Jupiter
13. .... is/are located at the center of our solar system.
    (a) moon - Sun (b) moon - Earth (c) Sun only (d) Earth only



14 The Sun is .... sized star.
- ⓐ small ⓑ medium ⓒ large ⓓ giant

15 A watershed is an area where water collects from .... and flows in one direction.
- ⓐ one source ⓑ rain only ⓒ different sources ⓓ lakes only

16 Constellations appear.................. in the sky during the year.
- ⓐ at different positions ⓑ at the same position ⓒ in winter only ⓓ in summer only

17 .... are celestial bodies that make their own light.
- ⓐ Moons - planets ⓑ Sun - stars ⓒ Sun - planets ⓓ Earth - Sun

18 Solar system includes .... at its center and eight planets around it.
- ⓐ the moon ⓑ the Sun ⓒ Earth ⓓ Jupiter

19 At noon the sun forms .... shadow of objects.
- ⓐ longest ⓑ shortest ⓒ medium ⓓ changes

20 Day and night phenomenon occurs due to the rotation of Earth around.....
- ⓐ the Sun ⓑ its axis ⓒ the moon ⓓ solar system

21 Revolution of moon around Earth causes ....
- ⓐ constellation ⓑ rotation ⓒ moon phases ⓓ planets gravity

22 The .... is formed when salty sea water meets fresh river water
- ⓐ lakes ⓑ wetlands ⓒ estuaries ⓓ streams

23 The number of stars in the solar system is ....
- ⓐ one ⓑ eight ⓒ nine ⓓ two

24 .... are celestial bodies that revolve around the Sun in fixed paths.
- ⓐ Stars and moon ⓑ eight planets ⓒ Sun and Earth ⓓ Sun and Jupiter

25 We see the moon shining in the sky, because it.....................
- ⓐ absorbs sunlight ⓑ produces light ⓒ lets light pass ⓓ reflects sunlight

26 The Sun is a star because it.............................
- ⓐ reflects light ⓑ absorbs light ⓒ gives off light ⓓ allows light pass

27 All the following materials can be used to filter wastewater in simple water filter, except ....
- ⓐ cotton ⓑ wood ⓒ charcoal ⓓ sand

28 ....is considered as a type of friction force.
- ⓐ Magnetism ⓑ gravity ⓒ electric ⓓ air resistance



29 Earth's gravity pulls down things toward Earth.................
ⓐ in inclined angle ⓑ perpendicularly ⓒ horizontally forward ⓓ vertically upwards

30 Object moves under the effect of................. forces.
ⓐ pull - push ⓑ pull - drag ⓒ revolving and push ⓓ pull and attraction

31 .... is a factor that acts against gravity force.
ⓐ Magnetism ⓑ mass of object ⓒ air resistance ⓓ Object shape

32 Which of the following is found between porous of rocks below Earth surface?
ⓐ Ice ⓑ Groundwater ⓒ Oceans ⓓ Water vapour

33 Rivers and streams contain .... water, while ponds contain .... water.
ⓐ salt – fresh ⓑ fresh – salt ⓒ running – still ⓓ still – running

34 Among the sources of water which human can use for drinking ....
ⓐ seas ⓑ oceans ⓒ saltwater lakes ⓓ rivers

35 Humans can get their needs of ....from rivers, streams and groundwater.
ⓐ oxygen gas ⓑ carbon dioxide gas ⓒ salt water ⓓ fresh water

36 Magnetism is a kind of............... force.
ⓐ attraction only ⓑ repulsion only ⓒ visible ⓓ invisible

37 Earth attracts objects towards.................
ⓐ its center ⓑ the sky ⓒ the moon ⓓ the sun

38 As the mass of the object increases, its .... increases.
ⓐ movement ⓑ force ⓒ gravity ⓓ illumination

39 The gravitational force of an object .... as its mass increase.
ⓐ equal zero ⓑ increase ⓒ decrease ⓓ doesn't change

40 Water filters are used to remove .... materials from polluted water.
ⓐ harmful ⓑ solar system ⓒ day and night ⓓ electricity

41 .... of resources, requires managing its usage methods.
ⓐ Depletion ⓑ Sustainability ⓒ Renewability ⓓ Scarcity

42 Pollution is one of the problems to achieve (affect) .... of resources.
ⓐ preservation ⓑ sustainability ⓒ restoration ⓓ renewability

43 All the following are from sources of water on the Earth, except ....
ⓐ groundwater ⓑ ponds ⓒ glaciers ⓓ molten rocks



44. The amount if salt water on the Earth is .... the amount of fresh water.
    - (a) larger than
    - (b) smaller than
    - (c) equal to
    - (d) half

45. .... are formed when water collects in low-lying areas.
    - (a) Seas
    - (b) Oceans
    - (c) Lakes
    - (d) Rivers

46. The force of .... keeps the planets on their paths around the sun
    - (a) friction
    - (b) gravity
    - (c) air resistance
    - (d) electricity

47. The acting force on the moon to make it revolves around the earth is.........
    - (a) Earth's gravity
    - (b) sun's gravity
    - (c) moon's gravity
    - (d) Mars's gravity

48. Mountains and valleys are parts of ....
    - (a) geosphere
    - (b) atmosphere
    - (c) biosphere
    - (d) hydrosphere

49. 96.5% of Earth's water is ....
    - (a) salt water
    - (b) boiling water
    - (c) fresh water
    - (d) frozen water

50. A boy on slide moves down toward due to the effect off ....
    - (a) friction
    - (b) gravity
    - (c) temperature of air
    - (d) boy's Hight

51. Gravity keeps the moon revolve in orbit around..................
    - (a) The Sun
    - (b) the earth
    - (c) Itself
    - (d) another moon

52. .... process is used to get filtered water from polluted water.
    - (a) Recycling
    - (b) Sustainability
    - (c) Preservation
    - (d) Conservation

53. Rainwater is a part of ....
    - (a) biosphere
    - (b) hydrosphere
    - (c) geosphere
    - (d) atmosphere

54. Mountains and valleys are parts of ....
    - (a) geosphere
    - (b) atmosphere
    - (c) biosphere
    - (d) hydrosphere

55. 96.5% of Earth's water is ....
    - (a) salt water
    - (b) boiling water
    - (c) fresh water
    - (d) frozen water

56. The pulling force of a magnet attracts materials made of
    - (a) Wood
    - (b) plastic
    - (c) iron
    - (d) rocks

57. Magnet attracting paper clips is evidence that magnet..................
    - (a) needs force
    - (b) has a force
    - (c) loses force
    - (d) gains force

58. The area of land where all the water flows in one direction to a common location as ocean is called ....
    - (a) tributary
    - (b) estuary
    - (c) wetland
    - (d) watershed



59. .... are parts of geosphere.
ⓐ Plants ⓑ Rocks ⓒ Gases ⓓ Water bodies

60. An example of saltwater ecosystem is ......
ⓐ Nile river ⓑ Lake Assal ⓒ glacier ⓓ Lake Nasser

61. Most of fresh water on Earth is found in the form of ....
ⓐ groundwater ⓑ rivers ⓒ glacier ⓓ streams

62. A force that is created between two attached surfaces leading to slow movement is called.................. force.
ⓐ pushing ⓑ dragging ⓒ friction ⓓ pulling

63. The force that causes skydivers to moves down is called ....
ⓐ friction ⓑ gravity ⓒ air resistance ⓓ electricity

64. Misuse of fresh water may cause .... of animals.
ⓐ diversity ⓑ growth ⓒ extinction ⓓ increasing

65. Among ways to protect natural resources ....
ⓐ pollution ⓑ deforestation ⓒ sustainability ⓓ overfishing

66. In the late afternoon, the sun appears in the.......... direction in the sky.
ⓐ east ⓑ west ⓒ north ⓓ south

67. A group of plants and animals which live together in a large area characterized by its climate is called......
ⓐ atmosphere ⓑ hydrosphere ⓒ biome ⓓ lithosphere

68. Magnetic force is considered a force of ....
ⓐ push only ⓑ pull only ⓒ friction ⓓ push or pull

69. The force of............keeps the planets on their paths around the Sun.
ⓐ air resistance ⓑ friction ⓒ gravity ⓓ electricity

70. The acting force on the moon to make it revolves around the Earth is..........
ⓐ Earth's gravity ⓑ Sun's gravity ⓒ moon's gravity ⓓ Mars's gravity

71. Water covers approximately ....% of Earth's surface.
ⓐ 10 ⓑ 30 ⓒ 50 ⓓ 70

72. Magnetic force is considered a force of ....
ⓐ push only ⓑ pull only ⓒ friction ⓓ push or pull

73. Gravity is considered a .... force.
ⓐ push ⓑ friction ⓒ visible ⓓ pull

74. The .... makes up most of the planet Earth
ⓐ land ⓑ oxygen gas ⓒ water ⓓ mountains

75. The total amount of water on Earth is ....
ⓐ decreased ⓑ increased ⓒ changed ⓓ not changed

76. Plants need water to perform the process of ....
ⓐ growth ⓑ respiration ⓒ combustion ⓓ photosynthesis

77. The force of .... holds objects on Earth.
ⓐ wind ⓑ air resistance ⓒ push ⓓ gravity

78. The .... is / are used to purify unclean water.
ⓐ desalination ⓑ nature reserves ⓒ solar panels ⓓ filters

79. The .... contains a mixture of fresh and salt water.
ⓐ river ⓑ stream ⓒ sea ⓓ estuary

80. The hydrosphere contains all of the following except ....
ⓐ rivers ⓑ air ⓒ seas ⓓ oceans

81. Tree leaves are part of the ....
ⓐ geosphere ⓑ hydrosphere ⓒ biosphere ⓓ atmosphere

82. Frogs live in .... water.
ⓐ lakes ⓑ ponds ⓒ seas ⓓ oceans

83. Salty water is found in all of the following except ....
ⓐ lakes ⓑ seas ⓒ rivers ⓓ oceans

84. Water that flows from an area of high altitude to an area of lower altitude in a definite path is known as ....
ⓐ ocean ⓑ river ⓒ sea ⓓ lake

85. The geosphere contains all of the following except.....................
ⓐ minerals ⓑ rocks ⓒ oxygen ⓓ soil

87. Rivers are considered a part of the ....
ⓐ biosphere ⓑ hydrosphere ⓒ atmosphere ⓓ geosphere

88. Paper is made from ....
ⓐ iron ⓑ plastic ⓒ trees ⓓ copper



89. The planets revolve in fixed orbits around the sun under the effect of the gravity of ....
   - (a) Earth
   - (b) Moon
   - (c) Jupiter
   - (d) Sun

90. From the sources of salt water..................
   - (a) rivers
   - (b) wetlands
   - (c) seas
   - (d) groundwater

91. All of the following are elements of the geosphere except ....
   - (a) minerals
   - (b) helium
   - (c) rocks
   - (d) mountains

92. Fresh water mixes with salt water in ....
   - (a) ocean
   - (b) estuary
   - (c) lake
   - (d) river

93. The .... contains fresh water.
   - (a) ponds
   - (b) estuaries
   - (c) seas
   - (d) oceans

94. Most fresh water found in the ....form.
   - (a) liquid
   - (b) frozen
   - (c) gaseous
   - (d) still

95. The .... belongs to the geosphere.
   - (a) gases
   - (b) minerals
   - (c) snake
   - (d) rivers

96. The .... lives in water streams.
   - (a) salamander
   - (b) Moses fish
   - (c) frog
   - (d) salmon

97. The ponds are characterized by .... water.
   - (a) fast flowing
   - (b) very salty
   - (c) still
   - (d) salty

98. The .... are defined as an above-ground land areas partially covered with water.
   - (a) rivers
   - (b) oceans
   - (c) seas
   - (d) wetlands

99. The water stored in the cracks andspaces of underground rocks is called ....
   - (a) lakes
   - (b) groundwater
   - (c) seas
   - (d) oceans

100. Swamps are considered one of the ....
   - (a) lakes
   - (b) seas
   - (c) rivers
   - (d) wetlands

Question 02 put (true) or (false)

1. Earth revolves around the Sun once every 24 hours ( )
2. Earth revolves around the Sun once every one day. ( )

3. The Sun doesn't revolve around Earth ( )
4. Jupiter is the fastest planet that rotates on its axis in the solar system. ( )
5. Dumping factories wastes into the water causes water pollution and makes it unfit for drinking ( )
6. Constellations have similar shapes in the sky ( )
7. Dams are used to filter polluted water for reuse. ( )
8. The Earth takes (12) hours to make a complete cycle on its axis. ( )
9. The constellations help us to determine the main directions. ( )
10. Length of shadows of different objects don't change during day. ( )
11. Stars are solid objects made up of rocks. ( )
12. The Sun is the biggest star in the universe ( )
13. All people in different countries see the star in the sky at the same time. ( )
14. The stars are far away from Earth. ( )
15. We can feel the movement of Earth easily. ( )
16. Constellations appear in the sky are different in winter than in summer ( )
17. The moon reflects sunlight that falls on it. ( )
18. Constellations have similar shapes in the sky. ( )
19. The moon seems shiny because it absorbs sunlight ( )
20. The Sun is necessary for continuity of life on Earth ( )
21. Some human activities are responsible for water pollution. ( )
22. The Sun is the biggest star in the universe. ( )
23. Moon and stars make their own light. ( )
24. The sun appears in the same place in the sky all the day. ( )
25. The length of day and night are always equal during the whole year. ( )
26. Stars are made up of hot gases ( )
27. Clothes are made from plant and animal products. ( )
28. Oceans, lakes and rivers are included in the hydrosphere ( )



29. Among the sources of fresh water are rains ( )
30. The type of water in rivers is fresh water only. ( )
31. We must conserve fresh water, because it is limited on Earth. ( )
32. Wetlands are examples of salt water. ( )
33. Water that found slightly above Earth's surface level is known as oceans. ( )
34. Overfishing helps increase the number of fish in any body of water. ( )
35. The gravity of moon affects the ocean tides. ( )
36. Earth pulls object toward its moon. ( )
37. Living organisms are parts of geosphere. ( )
38. Gases which surround the Earth represent the atmosphere. ( )
39. An orbit is a spherical shape in which the planets revolve around the sun ( )
40. Rivers and streams are running freshwater bodies. ( )
41. Moon stays in fixed orbit around Earth due to the gravity between them. ( )
42. Gravity of Earth pushes objects towards its center. ( )
43. All objects are pulled toward the ground due to the effect of gravity. ( )
44. Magnetism is a type of friction force ( )
45. Gravity pulls objects toward the center of Earth. ( )
46. Different star clusters can be observed more in the summer than in the winter ( )
47. Air resistance slows down the speed of parachutes. ( )
48. Light objects reach Earth faster than heavy objects in the absence of air resistance ( )
49. Planets revolve around the sun by the effect of gravitational push force. ( )
50. Hunting is allowed in natural reserves ( )
51. Astronauts can be sent to explore distant stars ( )
52. The force of magnet is always attraction force only. ( )
53. As the mass of the object increases, its gravity increases ( )



54. Magnet has the force of attracting metals such as silver and gold. ( )
55. Weathering of rocks as a result of the effect of rains is an example of an interaction between hydrosphere and biosphere. ( )
56. Half of the moon is illuminated at the first quarter phase of the moon. ( )
57. When we visit planetarium, we will see images about living organisms ( )
58. The orbit of each planet has an ellipse shape. ( )
59. The components of the ecosystem do not interact with each other ( )
60. Overconsumption of natural resources helps conserve them ( )

Question 03 Complete the following sentences

1. Planets and .... can't make their own light.
2. The moon seems bright as it .... sunlight.
3. The wide space that contains celestial object is called ....
4. Stars are made up of ....
5. In early morning, the Sun appears in .... , while at noon it appears in ....
6. Seasons phenomenon occurs due to the revolution of Earth around the ....
7. The sun located in the center of the ....
8. At noon the Sun forms .... shadow of an object.
9. The Sun produces .... energy that warms the Earth.
10. Every night, new stars appear from ....
11. A group of stars, planets and gases held together by gravity is called ....
12. The sun is a ....that can give out light.
13. The Sun appears in the ....direction during the early morning.
14. The Earth rotates around its axis once every ....hours.
15. In the solar system all planets revolves in fixed paths called ....
16. We must take a quick shower to conserve ....
17. The Earth's system that includes all living organisms is called................

18. The amount of fresh water on Earth is ....than the amount of salt water.
19. Stars seem bright because they are made up of ....
20. The axis of Earth planet is ....
21. ....is a force generated between two touching surfaces.
22. Water lilies grow in ....water.
23. Clothes can be made from ....products or ....products.
24. Any object has ....depending on its mass.
25. Earth revolves around the Sun in a fixed path that has ....shape
26. The force that keeps all planets around the Sun is called ....
27. When a river meets a sea, an ....is formed.
28. The shallow areas of saltwater ecosystems include ....and ....
29. In high Dam, water is used to generate ....
30. .... water is found in rivers, most of lakes and streams.
31. Reducing bathing time helps ....water consumption.
32. Building a ....cross a tributary can change the amount of water in it.
33. To conserve water, we can ....the time of washing our hands.
34. Air resistance is a type of ....force.
35. If we use fossil fuels wisely without negatively affecting their amount in the future, this is called ....
36. The moon moves around ....due to gravity.
37. The gravity of the moon affects the phenomena of ocean ....
38. When a boy moves down a slide, this is due to the force of ....
39. Water consumption can be rationalized by ....
40. Magnetism is a force that attracts some ....objects.
41. ....is a pull or push that is applied to an object.
42. Gravity pulls objects toward the ....of Earth.
43. Magnet can attract some objects by a force called ....
44. The force between two magnets is called ....

45. ....revolves around the sun in fixed orbit.
46. The direction of Earth's gravity is always toward ....of Earth.
47. ....force opposes the motion of the body and slows down its speed.
48. Rocks and minerals are components of the ....
49. Nasser lake represents the ....water ecosystem
50. Lake .... is one of the salty lakes in Egypt.
51. Binoculars and telescopes are tools used to ....
52. Excessive use of well water leads to ....of wells.
53. If the water at the upstream decreases, the water at the downstream will ....
54. Among the factors that affect sustainability are ....and ....
55. Poor water quality exposes many living organisms to danger ....
56. Wastewater engineers in Egypt work in ....
57. The force of gravity between two objects decreases as the ....between them increases.
58. Air resistance acts ....to the direction of Earth's gravity.
59. Magnets have a strong attraction to certain metals, such as ....
60. The earth rotates around its axis in ....clockwise direction

Question 04 write scientific term for each of the following

1. The spinning of Earth on its axis. ( )
2. An imaginary line passing through the Earth from the north pole to the south pole. ( )
3. The group of stars forms a pattern in the sky. ( )
4. It is a group of stars, planets and gases held together by gravity ( )
5. Dark celestial object revolves around Earth and reflects the sun light. ( )

6. A medium size star that is the center of the solar system. (   )
7. They are giant spheres of superhot gases most of them are hydrogen and helium. (   )
8. A special building with dome celling and is used to see images of celestial bodies. (   )
9. The large water body that is surrounded by land. (   )
10. The water bodies that surround the continents. (   )
11. It is an area of land where all the water flows in one direction to a common location such as an ocean, a sea or other large water body. (   )
12. Restricting access to and use of resources. (   )
13. It is the water that has already been used in homes and different industries. (   )
14. They are small water bodies such as small creeks or streams that flows into bigger rivers (   )
15. A force of attraction between objects. (   )
16. The effect that pulls or pushes an object to make it moves. (   )
17. An invisible force that attracts iron paper clips to the magnet. (   )
18. The force that is found between two magnets or between the magnet and an object. (   )
19. The force that opposes the motion of a body across a solid, a liquid or gas. (   )
20. A type of pollution that occurs as a result of throwing waste in rivers and seas. (   )
21. The system that includes humans, animals and plants of Earth. (   )
22. An area characterized by greenery, soil, climate, and wildlife that distinguished it from other areas. (   )
23. The area along the coast that disappears at the high tide and appears at the low tide. (   )



24. A force between two objects in contact with each other's, and it affects in the opposite direction of movement force. ( )
25. A type of frictional force generating from the movement of an object in the air. ( )
26. The low which states that the force of gravity is constant and acts on all objects in the same way. ( )
27. A scientist proved that the Sun is the center of our solar system. ( )
28. A phenomenon that happens due to the increase of the level of water in rivers and streams. ( )
29. A phenomenon that happens due to the decrease of the level of water in rivers and streams ( )
30. A phenomenon takes place in oceans and seas due to gravity of moon. ( )

Question 05 correct the underline word

1. Human is part of the hydrosphere. ( )
2. Plants need water to do the process of reproduction ( )
3. Water covers about 50% of the Earth's surface ( )
4. The total amount of water on Earth changes ( )
5. Rivers represent the atmosphere of the Earth. ( )
6. Plants need water to do the process of growing. ( )
7. Lake Assal is one of the freshest lakes ( )
8. Pond water is characterized by fast-flowing water ( )
9. Salamanders live in the oceans ( )
10. Freshwater ecosystems cover a large portion of the Earth. ( )
11. 3.5% of the water on Earth's surface is salty. ( )
12. Water lilies live in sea water ( )
13. Lakes are known as a salty water source which its floor contains mountains and plains ( )



14	Seas surround the continents and connect to each other	( )
15	Estuaries are considered one of the large bodies of water surrounded by land on all sides	( )
16	Ponds are a type of estuary	( )
17	Plastic products are made from cotton	( )
18	The state provides gardens to protect endangered species.	( )
19	Using a water filter leads to water pollution	( )
20	Water is one of the most important industrial resources on Earth planet	( )
21	When building a factory close to a body of water, this causes to protect the body	( )
22	Water is one of the most important industrial resources on Earth planet.	( )
23	Rivers seep into cracks and pores of rocks underground	( )
24	Deforestation leads to protect renewable resources	( )
25	Dams are used to filter contaminated water for reuse	( )
26	Constellations are most visible in the spring.	( )
27	We use tools such as microscopes to study celestial objects.	( )
28	Earth completes one rotation on its axis in 365 days	( )
29	The earth rotates around its axis, which runs horizontally.	( )
30	Earth is the center of motion in the solar system	( )

Question 06 give reason

1. Occurrence of day and night.

....

2. The regular pattern of day and night.

....



3. Occurrence of seasons.

....

4. Although Earth rotates on its axis, we don't feel its movement.

....

5. The length of the shadow of an object changes throughout the day.

....

6. The moon appears bright in the sky at night.

....

7. Earth and the moon are not considered stars.

....

8. The Sun looks much larger to us than other stars.

....

9. Water is important for all plants on Earth.

....

10. Hiding of worms inside the soil is an example of an interaction between two Earth's spheres.

....

11. Farms near tributaries may cause water pollution

....

12. We should turn off water during washing dishes.

....

13. Countries prevent using or developing natural resource in some protected areas of land.

....

14. Cutting down too many trees of forests leads to soil erosion.

....

15. Scientists recycle fresh waste water to get filtered water again.

....

16. We must conserve fresh water.

....



17. You should turn off water tap during brushing your teeth.

....

18. Groundwater is called by this name.

....

19. The quality of fresh water affects the life of living organisms live in it.

....

20. The force of gravity has an important role in the solar system.

....

21. The moon rotates around the Earth in a fixed orbit.

....

22. After the skydivers jump from a plane, they always move toward the ground.

....

23. The moon is attached to the earth.

....

24. Paper clips are pulled towards the magnet

....

25. Gravity of the earth is greater than the gravity of the moon.

....

26. Gravitational force depends on distance

....

27. Planets revolve around the Sun in fixed orbits

....

28. You always land on the ground when you jump up.

....

29. The skydivers land safely when he opens his parachute.

....

30. Some iron nails are attracted to a magnet.

....

31. Scientists use the word sphere to name each of Earth's systems

....

32. Jellyfish cannot live in ponds.

....

33. Fish do not live in Lake Assal.

....

34. Objects on Earth's surface will remain stable.

....

Question 07 what happens

1. Earth doesn't rotate on its axis.

....

2. Half of Earth faces the Sun.

....

3. The distance between the earth and the moon increases twice.

....

4. The mass of moon becomes twice its real mass.

....

5. The mass of the moon decreases to half.

....

6. The gravity of the Sun if its mass decreases than it is now.

....

7. Absence of gravity between Sun and the planets of solar system.

....

8. You throw a basketball into the air.

....

9. A magnet is placed near to some paper clips

....

10. The gravity of the earth is a repulsion force not an attraction force.

....

11. A person uses the brake of a moving bicycle.

....

12. To the speed of skydiver if he opens his parachute during landing.

....

13. If a metal ball and a feather are fallen down from a tower.

....

14. The river water meets the sea water.

....

15. People don't conserve fresh water.

....

16. Water is collected in a low-laying area.

....

17. The quality of fresh water affects the life of living organisms live in it.

....

18. You mix clear water with small amount of mud.

....

19. Fish are eaten more than they are replaced in the ocean.

....

20. The rate of rain fall increases on a river.

....

21. Water changes from one state to another in relation to its total quantity.

....

22. The cows started eating all the grass before the new grass grew.

....



Question 08 Answer The following Questions

1. Mention three uses of water.

....

2. Mention the Earth's interacting systems Earthworms live in the soil and make it shelter for them.

....

3. Classify the following water sources according to their type.
Seas - ponds - streams

....

4. Mention some freshwater sources on Earth's surface.

....

5. Name a device that used to observe celestial bodies.

....

انتهت الأسئلة مع أطيب الامنيات بالنجاح

كل أسئلة الشيت أسئلة رسميه مجمعة من أسئلة المحافظات وأسئلة كتاب المدرسة



Second term Questions Bank



Question 01 Choose the correct answer

1. The Sun appears as it moves from ....to ....
   - a) south - north
   - b) west - east
   - c) east - west
   - d) north - south
2. The solar system consists of some...............revolve around...............
   - a) Sun - planets
   - b) moons - planet
   - c) planets -Sun
   - d) planets - moon
3. The fastest planet revolves around the sun is..................
   - a) the Sun
   - b) Earth
   - c) Jupiter
   - d) the moon
4. The sun and other stars are made up of................
   - a) hot solids
   - b) cold solids
   - c) hot gases
   - d) cold liquids
5. At the noon, the Sun appears in the .... in the sky.
   - a) east
   - b) west
   - c) left
   - d) center
6. The imaginary line that passes through Earth's center is called...............
   - a) the day
   - b) the axis
   - c) the night
   - d) the pole
7. It is the orbiting of an object around another object ....
   - a) rotation
   - b) spinning
   - c) revolution
   - d) gravity
8. The group of stars that make a certain shape in the sky is called.........
   - a) wetland
   - b) biosphere
   - c) constellation
   - d) gravity
9. Prevent developing of Ras Mohamed Protectorate is considered ....
   - a) preservation
   - b) pollution
   - c) sustainability
   - d) consumption
10. .... gives heat and light.
    - a) Stars
    - b) Moons
    - c) Plants
    - d) Satellites
11. The moon phase in which a small part is illuminated is called..................
    - a) new moon
    - b) crescent
    - c) gibbous
    - d) full moon
12. The star that is present in our solar system is............
    - a) the moon
    - b) the Sun
    - c) Earth
    - d) Jupiter
13. .... is/are located at the center of our solar system.
    - a) moon - Sun
    - b) moon - Earth
    - c) Sun only
    - d) Earth only



14. The Sun is .... sized star.
   - (a) small
   - (b) medium
   - (c) large
   - (d) giant

15. A watershed is an area where water collects from .... and flows in one direction.
   - (a) one source
   - (b) rain only
   - (c) different sources
   - (d) lakes only

16. Constellations appear.................. in the sky during the year.
   - (a) at different positions
   - (b) at the same position
   - (c) in winter only
   - (d) in summer only

17. .... are celestial bodies that make their own light.
   - (a) Moons - planets
   - (b) Sun - stars
   - (c) Sun - planets
   - (d) Earth - Sun

18. Solar system includes .... at its center and eight planets around it.
   - (a) the moon
   - (b) the Sun
   - (c) Earth
   - (d) Jupiter

19. At noon the sun forms .... shadow of objects.
   - (a) longest
   - (b) shortest
   - (c) medium
   - (d) changes

20. Day and night phenomenon occurs due to the rotation of Earth around.....
   - (a) the Sun
   - (b) its axis
   - (c) the moon
   - (d) solar system

21. Revolution of moon around Earth causes ....
   - (a) constellation
   - (b) rotation
   - (c) moon phases
   - (d) planets gravity

22. The .... is formed when salty sea water meets fresh river water
   - (a) lakes
   - (b) wetlands
   - (c) estuaries
   - (d) streams

23. The number of stars in the solar system is ....
   - (a) one
   - (b) eight
   - (c) nine
   - (d) two

24. .... are celestial bodies that revolve around the Sun in fixed paths.
   - (a) Stars and moon
   - (b) eight planets
   - (c) Sun and Earth
   - (d) Sun and Jupiter

25. We see the moon shining in the sky, because it.....................
   - (a) absorbs sunlight
   - (b) produces light
   - (c) lets light pass
   - (d) reflects sunlight

26. The Sun is a star because it.............................
   - (a) reflects light
   - (b) absorbs light
   - (c) gives off light
   - (d) allows light pass

27. All the following materials can be used to filter wastewater in simple water filter, except ....
   - (a) cotton
   - (b) wood
   - (c) charcoal
   - (d) sand

28. ....is considered as a type of friction force.
   - (a) Magnetism
   - (b) gravity
   - (c) electric
   - (d) air resistance



29 Earth's gravity pulls down things toward Earth.................
(a) in inclined angle (b) perpendicularly (c) horizontally forward (d) vertically upwards

30 Object moves under the effect of................. forces.
(a) pull - push (b) pull - drag (c) revolving and push (d) pull and attraction

31 .... is a factor that acts against gravity force.
(a) Magnetism (b) mass of object (c) air resistance (d) Object shape

32 Which of the following is found between porous of rocks below Earth surface?
(a) Ice (b) Groundwater (c) Oceans (d) Water vapour

33 Rivers and streams contain .... water, while ponds contain .... water.
(a) salt – fresh (b) fresh – salt (c) running – still (d) still – running

34 Among the sources of water which human can use for drinking ....
(a) seas (b) oceans (c) saltwater lakes (d) rivers

35 Humans can get their needs of ....from rivers, streams and groundwater.
(a) oxygen gas (b) carbon dioxide gas (c) salt water (d) fresh water

36 Magnetism is a kind of............... force.
(a) attraction only (b) repulsion only (c) visible (d) invisible

37 Earth attracts objects towards.................
(a) its center (b) the sky (c) the moon (d) the sun

38 As the mass of the object increases, its .... increases.
(a) movement (b) force (c) gravity (d) illumination

39 The gravitational force of an object .... as its mass increase.
(a) equal zero (b) increase (c) decrease (d) doesn't change

40 Water filters are used to remove .... materials from polluted water.
(a) harmful (b) solar system (c) day and night (d) electricity

41 .... of resources, requires managing its usage methods.
(a) Depletion (b) Sustainability (c) Renewability (d) Scarcity

42 Pollution is one of the problems to achieve (affect) .... of resources.
(a) preservation (b) sustainability (c) restoration (d) renewability

43 All the following are from sources of water on the Earth, except ....
(a) groundwater (b) ponds (c) glaciers (d) molten rocks



44 The amount if salt water on the Earth is .... the amount of fresh water.

ⓐ larger than ⓑ smaller than ⓒ equal to ⓓ half

45 .... are formed when water collects in low-lying areas.

ⓐ Seas ⓑ Oceans ⓒ Lakes ⓓ Rivers

46 The force of .... keeps the planets on their paths around the sun

ⓐ friction ⓑ gravity ⓒ air resistance ⓓ electricity

47 The acting force on the moon to make it revolves around the earth is.........

ⓐ Earth's gravity ⓑ sun's gravity ⓒ moon's gravity ⓓ Mars's gravity

48 Mountains and valleys are parts of ....

ⓐ geosphere ⓑ atmosphere ⓒ biosphere ⓓ hydrosphere

49 96.5% of Earth's water is ....

ⓐ salt water ⓑ boiling water ⓒ fresh water ⓓ frozen water

50 A boy on slide moves down toward due to the effect off ....

ⓐ friction ⓑ gravity ⓒ temperature of air ⓓ boy's Hight

51 Gravity keeps the moon revolve in orbit around..................

ⓐ The Sun ⓑ the earth ⓒ Itself ⓓ another moon

52 .... process is used to get filtered water from polluted water.

ⓐ Recycling ⓑ Sustainability ⓒ Preservation ⓓ Conservation

53 Rainwater is a part of ....

ⓐ biosphere ⓑ hydrosphere ⓒ geosphere ⓓ atmosphere

54 Mountains and valleys are parts of ....

ⓐ geosphere ⓑ atmosphere ⓒ biosphere ⓓ hydrosphere

55 96.5% of Earth's water is ....

ⓐ salt water ⓑ boiling water ⓒ fresh water ⓓ frozen water

56 The pulling force of a magnet attracts materials made of

ⓐ Wood ⓑ plastic ⓒ iron ⓓ rocks

57 Magnet attracting paper clips is evidence that magnet..................

ⓐ needs force ⓑ has a force ⓒ loses force ⓓ gains force

58 The area of land where all the water flows in one direction to a common location as ocean is called ....

ⓐ tributary ⓑ estuary ⓒ wetland ⓓ watershed



59. .... are parts of geosphere.
   a) Plants b) Rocks c) Gases d) Water bodies

60. An example of saltwater ecosystem is ......
   a) Nile river b) Lake Assal c) glacier d) Lake Nasser

61. Most of fresh water on Earth is found in the form of ....
   a) groundwater b) rivers c) glacier d) streams

62. A force that is created between two attached surfaces leading to slow movement is called................. force.
   a) pushing b) dragging c) friction d) pulling

63. The force that causes skydivers to moves down is called ....
   a) friction b) gravity c) air resistance d) electricity

64. Misuse of fresh water may cause .... of animals.
   a) diversity b) growth c) extinction d) increasing

65. Among ways to protect natural resources ....
   a) pollution b) deforestation c) sustainability d) overfishing

66. In the late afternoon, the sun appears in the.......... direction in the sky.
   a) east b) west c) north d) south

67. A group of plants and animals which live together in a large area characterized by its climate is called......
   a) atmosphere b) hydrosphere c) biome d) lithosphere

68. Magnetic force is considered a force of ....
   a) push only b) pull only c) friction d) push or pull

69. The force of............keeps the planets on their paths around the Sun.
   a) air resistance b) friction c) gravity d) electricity

70. The acting force on the moon to make it revolves around the Earth is..........
   a) Earth's gravity b) Sun's gravity c) moon's gravity d) Mars's gravity

71. Water covers approximately ....% of Earth's surface.
   a) 10 b) 30 c) 50 d) 70

72. Magnetic force is considered a force of ....
   a) push only b) pull only c) friction d) push or pull

73. Gravity is considered a .... force.
   a) push b) friction c) visible d) pull



74. The .... makes up most of the planet Earth
   - a. land
   - b. oxygen gas
   - c. water
   - d. mountains

75. The total amount of water on Earth is ....
   - a. decreased
   - b. increased
   - c. changed
   - d. not changed

76. Plants need water to perform the process of ....
   - a. growth
   - b. respiration
   - c. combustion
   - d. photosynthesis

77. The force of .... holds objects on Earth.
   - a. wind
   - b. air resistance
   - c. push
   - d. gravity

78. The .... is / are used to purify unclean water.
   - a. desalination
   - b. nature reserves
   - c. solar panels
   - d. filters

79. The .... contains a mixture of fresh and salt water.
   - a. river
   - b. stream
   - c. sea
   - d. estuary

80. The hydrosphere contains all of the following except ....
   - a. rivers
   - b. air
   - c. seas
   - d. oceans

81. Tree leaves are part of the ....
   - a. geosphere
   - b. hydrosphere
   - c. biosphere
   - d. atmosphere

82. Frogs live in .... water.
   - a. lakes
   - b. ponds
   - c. seas
   - d. oceans

83. Salty water is found in all of the following except ....
   - a. lakes
   - b. seas
   - c. rivers
   - d. oceans

84. Water that flows from an area of high altitude to an area of lower altitude in a definite path is known as ....
   - a. ocean
   - b. river
   - c. sea
   - d. lake

85. The geosphere contains all of the following except.....................
   - a. minerals
   - b. rocks
   - c. oxygen
   - d. soil

87. Rivers are considered a part of the ....
   - a. biosphere
   - b. hydrosphere
   - c. atmosphere
   - d. geosphere

88. Paper is made from ....
   - a. iron
   - b. plastic
   - c. trees
   - d. copper

89. The planets revolve in fixed orbits around the sun under the effect of the gravity of ....

ⓐ Earth ⓑ Moon ⓒ Jupiter ⓓ Sun

90. From the sources of salt water..................

ⓐ rivers ⓑ wetlands ⓒ seas ⓓ groundwater

91. All of the following are elements of the geosphere except ....

ⓐ minerals ⓑ helium ⓒ rocks ⓓ mountains

92. Fresh water mixes with salt water in ....

ⓐ ocean ⓑ estuary ⓒ lake ⓓ river

93. The .... contains fresh water.

ⓐ ponds ⓑ estuaries ⓒ seas ⓓ oceans

94. Most fresh water found in the ....form.

ⓐ liquid ⓑ frozen ⓒ gaseous ⓓ still

95. The .... belongs to the geosphere.

ⓐ gases ⓑ minerals ⓒ snake ⓓ rivers

96. The .... lives in water streams.

ⓐ salamander ⓑ Moses fish ⓒ frog ⓓ salmon

97. The ponds are characterized by .... water.

ⓐ fast flowing ⓑ very salty ⓒ still ⓓ salty

98. The .... are defined as an above-ground land areas partially covered with water.

ⓐ rivers ⓑ oceans ⓒ seas ⓓ wetlands

99. The water stored in the cracks and spaces of underground rocks is called ....

ⓐ lakes ⓑ groundwater ⓒ seas ⓓ oceans

100. Swamps are considered one of the ....

ⓐ lakes ⓑ seas ⓒ rivers ⓓ wetlands

Question 02 put (true) or (false)

1. Earth revolves around the Sun once every 24 hours ✗
2. Earth revolves around the Sun once every one day. ✗

No.	Statement	Answer
3	The Sun doesn't revolve around Earth	✓
4	Jupiter is the fastest planet that rotates on its axis in the solar system.	✓
5	Dumping factories wastes into the water causes water pollution and makes it unfit for drinking	✓
6	Constellations have similar shapes in the sky	✗
7	Dams are used to filter polluted water for reuse.	✗
8	The Earth takes (12) hours to make a complete cycle on its axis.	✗
9	The constellations help us to determine the main directions.	✓
10	Length of shadows of different objects don't change during day.	✗
11	Stars are solid objects made up of rocks.	✗
12	The Sun is the biggest star in the universe	✗
13	All people in different countries see the star in the sky at the same time.	✗
14	The stars are far away from Earth.	✓
15	We can feel the movement of Earth easily.	✗
16	Constellations appear in the sky are different in winter than in summer	✓
17	The moon reflects sunlight that falls on it.	✓
18	Constellations have similar shapes in the sky.	✗
19	The moon seems shiny because it absorbs sunlight	✗
20	The Sun is necessary for continuity of life on Earth	✓
21	Some human activities are responsible for water pollution.	✓
22	The Sun is the biggest star in the universe.	✗
23	Moon and stars make their own light.	✗
24	The sun appears in the same place in the sky all the day.	✗
25	The length of day and night are always equal during the whole year.	✗
26	Stars are made up of hot gases	✓
27	Clothes are made from plant and animal products.	✓
28	Oceans, lakes and rivers are included in the hydrosphere	✓
29	Among the sources of fresh water are rains	✓

30. The type of water in rivers is fresh water only. ✓
31. We must conserve fresh water, because it is limited on Earth. ✓
32. Wetlands are examples of salt water. ✗
33. Water that found slightly above Earth's surface level is known as oceans. ✗
34. Overfishing helps increase the number of fish in any body of water. ✗
35. The gravity of moon affects the ocean tides. ✓
36. Earth pulls object toward its moon. ✗
37. Living organisms are parts of geosphere. ✗
38. Gases which surround the Earth represent the atmosphere. ✓
39. An orbit is a spherical shape in which the planets revolve around the sun ✗
40. Rivers and streams are running freshwater bodies. ✓
41. Moon stays in fixed orbit around Earth due to the gravity between them. ✓
42. Gravity of Earth pushes objects towards its center. ✗
43. All objects are pulled toward the ground due to the effect of gravity. ✓
44. Magnetism is a type of friction force ✗
45. Gravity pulls objects toward the center of Earth. ✓
46. Different star clusters can be observed more in the summer than in the winter ✗
47. Air resistance slows down the speed of parachutes. ✓
48. Light objects reach Earth faster than heavy objects in the absence of air resistance ✗
49. Planets revolve around the sun by the effect of gravitational push force ✗
50. Hunting is allowed in natural reserves ✗
51. Astronauts can be sent to explore distant stars ✗
52. The force of magnet is always attraction force only. ✗
53. As the mass of the object increases, its gravity increases ✓
54. Magnet has the force of attracting metals such as silver and gold. ✗
55. Weathering of rocks as a result of the effect of rains is an example of an interaction between hydrosphere and biosphere. ✗
56. Half of the moon is illuminated at the first quarter phase of the moon. ✓

57. When we visit planetarium, we will see images about living organisms ✗
58. The orbit of each planet has an ellipse shape. ✓
59. The components of the ecosystem do not interact with each other ✗
60. Overconsumption of natural resources helps conserve them ✗

Question 03 Complete the following sentences

1. Planets and moon can't make their own light.
2. The moon seems bright as it reflects sunlight.
3. The wide space that contains celestial object is called universe
4. Stars are made up of hot gases
5. In early morning, the Sun appears in east, while at noon it appears in center of the sky.
6. Seasons phenomenon occurs due to the revolution of Earth around the sun
7. The sun located in the center of the solar system
8. At noon the Sun forms shorter shadow of an object.
9. The Sun produces thermal energy that warms the Earth.
10. Every night, new stars appear from East
11. A group of stars, planets and gases held together by gravity is called Galaxy
12. The sun is a star that can give out light.
13. The Sun appears in the east direction during the early morning.
14. The Earth rotates around its axis once every 24 hours.
15. In the solar system all planets revolves in fixed paths called orbit
16. We must take a quick shower to conserve freshwater.
17. The Earth's system that includes all living organisms is called biosphere
18. The amount of fresh water on Earth is less than the amount of salt water.
19. Stars seem bright because they are made up of hot gases
20. The axis of Earth planet is vertical
21. Friction is a force generated between two touching surfaces.
22. Water lilies grow in still water.



23. Clothes can be made from animal products or plant products.
24. Any object has gravity depending on its mass.
25. Earth revolves around the Sun in a fixed path that has oval (ellipse) shape
26. The force that keeps all planets around the Sun is called gravitational force
27. When a river meets a sea, an estuary is formed.
28. The shallow areas of saltwater ecosystems include coral reefs and intertidal zones
29. In high Dam, water is used to generate electricity
30. Fresh water is found in rivers, most of lakes and streams.
31. Reducing bathing time helps decrease water consumption.
32. Building a dam cross a tributary can change the amount of water in it.
33. To conserve water, we can decrease the time of washing our hands.
34. Air resistance is a type of friction force.
35. If we use fossil fuels wisely without negatively affecting their amount in the future, this is called sustainability
36. The moon moves around earth due to gravity.
37. The gravity of the moon affects the phenomena of ocean tide
38. When a boy moves down a slide, this is due to the force of gravity
39. Water consumption can be rationalized by taking a quick shower
40. Magnetism is a force that attracts some metal objects.
41. Force is a pull or push that is applied to an object.
42. Gravity pulls objects toward the center of Earth.
43. Magnet can attract some objects by a force called magnetism
44. The force between two magnets is called magnetism
45. The earth revolves around the sun in fixed orbit.
46. The direction of Earth's gravity is always toward the center of Earth.
47. Friction force opposes the motion of the body and slows down its speed.
48. Rocks and minerals are components of the geosphere
49. Nasser lake represents the fresh water ecosystem
50. Lake bardawil is one of the salty lakes in Egypt.
51. Binoculars and telescopes are tools used to see distant celestial bodies
52. Excessive use of well water leads to dry up of wells.
53. If the water at the upstream decreases, the water at the downstream will decrease



54. Among the factors that affect sustainability are pollution and overpopulation
55. Poor water quality exposes many living organisms to danger extinction
56. Wastewater engineers in Egypt work in Bahr Albaqar water treatment plant
57. The force of gravity between two objects decreases as the distance between them increases.
58. Air resistance acts opposite to the direction of Earth's gravity.
59. Magnets have a strong attraction to certain metals, such as iron, cobalt, nickel
60. The earth rotates around its axis in counter clockwise direction

Question 04 write scientific term for each of the following

	Statement	Term
1	The spinning of Earth on its axis.	Rotation
2	An imaginary line passing through the Earth from the north pole to the south pole.	Earth's axis
3	The group of stars forms a pattern in the sky.	constellation
4	It is a group of stars, planets and gases held together by gravity	Galaxy
5	Dark celestial object revolves around Earth and reflects the sun light.	The Moon
6	A medium size star that is the center of the solar system.	The Sun
7	They are giant spheres of superhot gases most of them are hydrogen and helium.	The stars
8	A special building with dome celling and is used to see images of celestial bodies.	Planetarium
9	The large water body that is surrounded by land.	Lake
10	The water bodies that surround the continents.	Oceans



11	It is an area of land where all the water flows in one direction to a common location such as an ocean, a sea or other large water body.	watershed
12	Restricting access to and use of resources.	preservation
13	It is the water that has already been used in homes and different industries.	Wastewater
14	They are small water bodies such as small creeks or streams that flows into bigger rivers	Tributaries
15	A force of attraction between objects.	Gravity
16	The effect that pulls or pushes an object to make it moves.	Force
17	An invisible force that attracts iron paper clips to the magnet.	Magnetism
18	The force that is found between two magnets or between the magnet and an object.	Magnetism
19	The force that opposes the motion of a body across a solid, a liquid or gas.	Friction force
20	A type of pollution that occurs as a result of throwing waste in rivers and seas.	water pollution
21	The system that includes humans, animals and plants of Earth.	Biosphere
22	An area characterized by greenery, soil, climate, and wildlife that distinguished it from other areas.	Biome
23	The area along the coast that disappears at the high tide and appears at the low tide.	Intertidal zone
24	A force between two objects in contact with each other's, and it affects in the opposite direction of movement force.	Friction force
25	A type of frictional force generating from the movement of an object in the air.	Air resistance
26	The low which states that the force of gravity is constant and acts on all objects in the same way.	The low of motion
27	A scientist proved that the Sun is the center of our solar system.	Nicolous copernicus
28	A phenomenon that happens due to the increase of the level of water in rivers and streams.	flooding

29	A phenomenon that happens due to the decrease of the level of water in rivers and streams	drought
30	A phenomenon takes place in oceans and seas due to gravity of moon.	Tides

Question 05 correct the underline word

1	Human is part of the hydrosphere.	biosphere
2	Plants need water to do the process of reproduction	photosynthesis
3	Water covers about 50% of the Earth's surface	71%
4	The total amount of water on Earth changes	doesn't change
5	Rivers represent the atmosphere of the Earth.	hydrosphere
6	Plants need water to do the process of growing.	photosynthesis
7	Lake Assal is one of the freshest lakes	salty
8	Pond water is characterized by fast-flowing water	still
9	Salamanders live in the oceans	starfish
10	Freshwater ecosystems cover a large portion of the Earth.	Salt water
11	3.5% of the water on Earth's surface is salty.	fresh
12	Water lilies live in sea water	ponds
13	Lakes are known as a salty water source which its floor contains mountains and plains	oceans
14	Seas surround the continents and connect to each other	Oceans
15	Estuaries are considered one of the large bodies of water surrounded by land on all sides	lakes
16	Ponds are a type of estuary	Wetland
17	Plastic products are made from cotton	Oil
18	The state provides gardens to protect endangered species.	Protectorates
19	Using a water filter leads to water pollution	Filtration

	Statement	Correction
20	Water is one of the most important <u>industrial</u> resources on Earth planet	renewable
21	When building a factory close to a body of water, this causes to <u>protect</u> the body	pollute
22	Water is one of the most important <u>industrial</u> resources on Earth planet.	renewable
23	<u>Rivers</u> seep into cracks and pores of rocks underground	Groundwater
24	Deforestation leads to <u>protect</u> renewable resources	damage
25	<u>Dams</u> are used to filter contaminated water for reuse	Filters
26	Constellations are most visible in the <u>spring.</u>	Winter
27	We use tools such as <u>microscopes</u> to study celestial objects.	Telescope
28	Earth completes one rotation on its axis in <u>365 days</u>	24 hours
29	The earth rotates around its axis, which runs <u>horizontally.</u>	vertically
30	<u>Earth</u> is the center of motion in the solar system	The sun

Question 06 give reason

1. Occurrence of day and night.
   Due to the rotation of the earth on its axis.
2. The regular pattern of day and night.
   Due to the rotation of the earth on its axis.
3. Occurrence of seasons.
   Due to the revolution of the earth around the sun.
4. Although Earth rotates on its axis, we don't feel its movement.
   Because we are moving with the same speed of Earth.
5. The length of the shadow of an object changes throughout the day.
   due to the change in the position of the sun in the sky.
6. The moon appears bright in the sky at night.
   Because it reflects the sunlight.




7. Earth and the moon are not considered stars.
   Because they don't give off their own light.

8. The Sun looks much larger to us than other stars.
   Because the sun is the closest star to earth.

9. Water is important for all plants on Earth.
   Because all plants need water to grow and some of them live in water.

10. Hiding of worms inside the soil is an example of an interaction between two Earth's spheres.
    Because worms belong to biosphere, while soil belongs to geosphere.

11. Farms near tributaries may cause water pollution
    Due to using of chemical fertilizers that cause water pollution

12. We should turn off water during washing dishes.
    To conserve fresh water

13. Countries prevent using or developing natural resource in some protected areas of land.
    To preserve natural resources.

14. Cutting down too many trees of forests leads to soil erosion.
    Because it leads to deforestation so water and wind can carry away soil causing soil erosion

15. Scientists recycle fresh waste water to get filtered water again.
    Because fresh water is limited natural resource and its important for all living organisms to survive

16. We must conserve fresh water.
    Because there is a limited amount of fresh water on Earth

17. You should turn off water tap during brushing your teeth.
    To conserve fresh water

18. Groundwater is called by this name.
    Because it is stored in the cracks and spaces of underground rocks

19. The quality of fresh water affects the life of living organisms live in it.
    Because poor quality of fresh water leads to death of thousands of living organisms and extinction of some species

20. The force of gravity has an important role in the solar system.

Because gravity between the sun and the and objects in the solar system keeps the planets revolve in fixed orbits around the sun

21. The moon rotates around the Earth in a fixed orbit.

Due to the gravitational force of the earth.

22. After the skydivers jump from a plane, they always move toward the ground.

Due to the earth gravity which pulls them toward the ground.

23. The moon is attached to the earth.

Due to the gravitational attraction between the earth and the moon.

24. Paper clips are pulled towards the magnet

Due to the force of magnetism.

25. Gravity of the earth is greater than the gravity of the moon.

Because the mass of the earth is greater than the mass of the moon.

26. Gravitational force depends on distance

Because when the distance between two objects increases, the gravitational force decreases and vice versa

27. Planets revolve around the Sun in fixed orbits

Due to the great gravitational pulling force between the sun and the planets.

28. You always land on the ground when you jump up.

Due to the effect of gravity that's always pull the objects toward it

29. The skydivers land safely when he opens his parachute.

The parachute slows down his speed on landing due to air resistance.

30. Some iron nails are attracted to a magnet.

Because the magnetism force pulls them toward the magnet

31. Scientists use the word sphere to name each of Earth's systems

Because the shape of earth is very close to be sphere

32. Jellyfish cannot live in ponds.
Because jelly fish can survive only in salty water

33. Fish do not live in Lake Assal.
Because it has high concentration of salt

34. Objects on Earth's surface will remain stable.
Because the force of gravity which pull objects to the earth center

Question 07 what happens

1. Earth doesn't rotate on its axis.
Phenomenon of day and night will not happen.

2. Half of Earth faces the Sun.
This half has day.

3. The distance between the earth and the moon increases twice.
The gravitational attraction between them would become smaller.

4. The mass of moon becomes twice its real mass.
The gravitational force between earth and the moon increases so the moon comes closer to earth and it might crash into the earth.

5. The mass of the moon decreases to half.
The moon would have less gravity.

6. The gravity of the Sun if its mass decreases than it is now.
The gravity of the sun will decrease.

7. Absence of gravity between Sun and the planets of solar system.
The planets will leave their orbits and float off into the space.

8. You throw a basketball into the air.
The ball will go up into the air and then fall down back to the ground due to the gravity force.

9. A magnet is placed near to some paper clips
The magnet will attack the paper clip due to the magnetism force.

10. The gravity of the earth is a repulsion force not an attraction force.
All objects on its surface will move upward away from earth's surface

11. A person uses the brake of a moving bicycle.
The break will produce friction force which slows the movement of the bicycle

12. To the speed of skydiver if he opens his parachute during landing.
the speed of the skydiver decreases gradually due to air resistance

13. If a metal ball and a feather are fallen down from a tower.
The metal ball will reach the ground first.

14. The river water meets the sea water.
An estuary is formed

15. People don't conserve fresh water.
The amount of fresh water on Earth will decrease

16. Water is collected in a low-laying area.
A lake is formed

17. The quality of fresh water affects the life of living organisms live in it.
It leads to death of living organisms and extinction of some species live in fresh water

18. You mix clear water with small amount of mud.
It will become dirty water

19. Fish are eaten more than they are replaced in the ocean.
They become rare and fishing will decrease

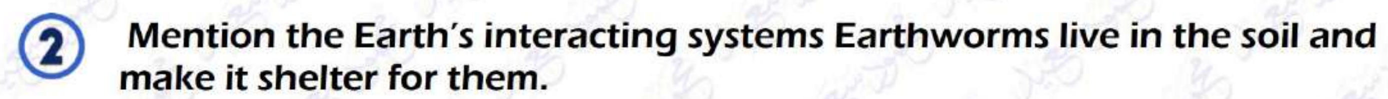
20. The rate of rain fall increases on a river.
The level of water on river will increase causing floods.

21. Water changes from one state to another in relation to its total quantity.
The total quantity of water doesn't change

22. The cows started eating all the grass before the new grass grew.
The cows will be hungry and may die.

Question 08 — Answer The following Questions

1. Mention three uses of water.
Cleaning – travelling – bathing– washing hands – brushing teeth – taking a shower – cooking food



2. Mention the Earth's interacting systems Earthworms live in the soil and make it shelter for them.

biosphere and geosphere

3. Classify the following water sources according to their type.
Seas - ponds - streams

Sea salt water
Ponds – stream fresh water

4. Mention some freshwater sources on Earth's surface.

Rivers – rainwater – groundwater

5. Name a device that used to observe celestial bodies.

Galileo binoculars / Hubble telescope

انتهت الأسئلة مع أطيب الامنيات بالنجاح

كل أسئلة الشيت أسئلة رسميه مجمعة من أسئلة المحافظات و أسئلة كتاب المدرسة





كيفية طباعة صفحات معينة من ملف معين



مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9

خطوة 1

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي – ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 5
اختيار A4

خطوة 6

حمل الآن

مجانا وحصريا

المراجعة رقم (2)

الترم الثانى







Pony Revision on Unit 3 – Concept 1

Biosphere and Hydrosphere Interaction

Weeks
1 - 2 - 3

1 Choose the correct answer:

1. Water covers approximately .... % of the Earth's surface.
   a. 10 b. 30 c. 50 d. 70
2. .... makes up most of the planet Earth.
   a. Land b. Oxygen gas c. Water d. Mountain
3. The total amount of water on Earth ....
   a. decreases b. increases c. changes d. does not change
4. Plants need water to perform the process of ....
   a. growth b. respiration c. combustion d. photosynthesis
5. The Earth's hydrosphere contains ....
   a. air b. soil c. rivers d. humans
6. The .... belong to the geosphere.
   a. gases b. minerals c. snakes d. rivers
7. The hydrosphere contains all the following, except ....
   a. rivers b. air c. seas d. oceans
8. The geosphere contains all the following, except ....
   a. minerals b. rocks c. oxygen d. soil
9. Rivers are considered a part of the ....
   a. biosphere b. hydrosphere c. atmosphere d. geosphere
10. Tree leaves are parts of the ....
    a. geosphere b. hydrosphere c. biosphere d. atmosphere
11. A body of water surrounded by land on all sides is known as ....
    a. a river b. a sea c. a lake d. groundwater
12. Water that flows from an area of higher altitude to an area of lower altitude in a definite path is known as ....
    a. an ocean b. a river c. a sea d. a lake

13. When plants decompose in the soil, the interaction is between ....
   a. the geosphere and the hydrosphere
   b. the hydrosphere and the biosphere
   c. the biosphere and the geosphere
   d. the atmosphere and the hydrosphere

14. When living organisms breathe, an interaction occurs between ....
   a. the biosphere and the geosphere
   b. the atmosphere and the hydrosphere
   c. the biosphere and the atmosphere
   d. the geosphere and the hydrosphere

15. The percentage of salt water represents about ....% of the Earth's water.
   a. 3.5　b. 30　c. 70　d. 96.5

16. The .... is considered from the examples of organisms that live in water streams.
   a. dolphin　b. whale　c. starfish　d. salmon

17. Frogs live in ....
   a. lakes　b. ponds　c. seas　d. oceans

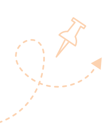
18. Salty water is found in all of the following bodies of water, except ....
   a. lakes　b. seas　c. rivers　d. oceans

19. Most fresh water is found in the .... form.
   a. liquid　b. frozen　c. gaseous　d. still

20. .... are the largest saltwater ecosystems.
   a. Ponds　b. Rivers　c. Lakes　d. Oceans

21. Water that seeps under the Earth's surface through porous rocks is known as ....
   a. lakes　b. groundwater　c. ponds　d. water streams

22. Ponds are characterized by .... water.
   a. fast-flowing　b. very salty　c. still　d. salty





2 Put (✓) or (✗):

1. Water is used only for drinking. ( )
2. A plant cannot grow without water. ( )
3. Living organisms need water to survive. ( )
4. The components of the ecosystem do not interact with each other. ( )
5. Groundwater is found above the surface of the Earth. ( )
6. All living organisms belong to the atmosphere. ( )
7. The glacier is considered a part of the geosphere. ( )
8. Air represents the atmosphere in the Earth's systems. ( )
9. The oceans contain a large amount of fresh water. ( )
10. The phenomenon of erosion by sea waves is an example of the interaction of the geosphere with the hydrosphere. ( )
11. A lake's water is always fresh. ( )
12. Glaciers represent most of the fresh water on Earth. ( )
13. Groundwater is found in the depths of the oceans. ( )
14. Oceans contain a large amount of fresh water. ( )
15. Coral reefs are examples of saltwater ecosystems. ( )
16. Lake Nasser and Lake Bardawil are examples of salty lakes in Egypt. ( )

3 Correct the underlined words:

1. Water turns from the solid state to the liquid state by <u>cooling</u>. (..................)
2. Human is part of the <u>hydrosphere</u>. (..................)
3. Plants need water to do the process of <u>reproduction</u>. (..................)
4. Water covers about <u>50%</u> of the Earth's surface. (..................)
5. Water turns into ice by <u>heating</u>. (..................)
6. The total amount of water on Earth <u>changes</u>. (..................)
7. Lake Assal is one of the <u>fresh</u> water lakes. (..................)
8. Pond water is characterized by <u>fast-flowing</u> water. (..................)
9. <u>Salamanders</u> live in the oceans. (..................)
10. <u>Freshwater</u> ecosystems cover a large portion of the Earth. (..................)

11. 3.5% of the water on Earth's surface is <u>salty</u>. (..................)
12. Water lilies live in <u>sea water</u>. (..................)

4 Complete the following sentences:

1. The ecosystem consists of .... and ....
2. From the components of the .... are oxygen and nitrogen.
3. The .... contains animals, birds, and fish.
4. Water turns into steam by ....
5. Water represents .... of the Earth.
6. Living organisms represent the .... of the Earth.
7. Water turns from a liquid to a solid by ....
8. An ecosystem consists of .... and non-living things.
9. The glacier is considered part of the ....
10. The winds that move objects are part of the ....
11. The phenomenon of erosion is an example of the interaction of the .... with the ....
12. Rocks and minerals are components of the ....
13. Water turns from a solid to a liquid by ....
14. Rivers belong to the ...., while human is part of the ....
15. Whales live in .... water.
16. Nasser Lake represents a .... water ecosystem.
17. Lake .... is one of the salty lakes in Egypt.
18. The shallow areas of saltwater ecosystems include .... and ....
19. .... is considered one of the living organisms that live in water streams.
20. Water lilies grow in .... water.
21. One of the fresh lakes in Egypt is ....



5 Write the scientific term:

1. It is the sphere that contains air and various gases. (..........)
2. It is the sphere that contains all living organisms. (..........)
3. It is the sphere that contains rocks, minerals, and soil. (..........)
4. It is an area characterized by greenery, soil, climate, and wildlife that distinguish it from other areas. (..........)
5. It is the water found under the surface of the Earth, seeping through porous rocks. (..........)

6 What is meant by the following:

1. The groundwater

....

....

2. The river

....

....

3. The lake

....

7 Mention the Earth's interacting systems in the following sentences:

1. Earthworms live in the soil and make it a shelter for them.

(..........)

2. Rocks and soil move when water flows.

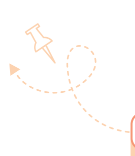
(..........)

3. Plants absorb carbon dioxide during the process of photosynthesis.

(..........)

4. Plants need water to grow. (..........)
5. Living organisms exchange gases with the air during respiration.

(..........)



8 What are the uses of water in our lives:

....

....

9 Give reasons for the following:

1. Water is important for the life of living organisms.

....

....

....

2. Water is considered a renewable resource.

....

3. Plants are considered a renewable resource.

....

....

4. Scientists use the word sphere to name each of the Earth's systems.

....

5. Jellyfish cannot live in ponds.

....

6. Fish do not live in Lake Assal.

....

7. Whales live in oceans.

....

10 What happens if:

1. Water changes from one state to another in relation to its total quantity?

....

2. Water disappears from the surface of the Earth?

....

Pony Revision on Unit 3 – Concept 2

Water As a Valuable Natural Resource

Weeks
4 - 5 - 6 - 7

1 Choose the correct answer:

1. A/An .... is known as the place where the river meets the sea.
   a. wetland b. estuary c. sea d. ocean
2. .... are defined as above-ground land areas that are partially covered with water.
   a. Rivers b. Oceans c. Seas d. Wetlands
3. The water stored in the cracks and spaces of underground rocks is called ....
   a. lakes b. groundwater c. seas d. oceans
4. .... are considered sources of fresh water.
   a. Estuaries b. Rivers c. Oceans d. Seas
5. Swamps are considered one of the ....
   a. lakes b. seas c. rivers d. wetlands
6. .... is/are among the sources of salt water on Earth.
   a. Rivers b. Wetlands c. Seas d. Groundwater
7. .... contain fresh water.
   a. Ponds b. Estuaries c. Seas d. Oceans
8. .... are formed when salty sea water meets fresh river water.
   a. Lakes b. Wetlands c. Estuaries d. Water streams
9. The .... is considered the largest body of water and contains salty water.
   a. swamp b. river c. ocean d. estuary
10. Ways to protect natural resources include ....
    a. pollution b. deforestation
    c. sustainability d. overfishing
11. A watershed is an area where water collects from .... and flows in one direction.
    a. one source b. rain only
    c. different sources d. lakes only

12. Paper is made from ....

a. iron
b. plastic
c. copper
d. tree

13. Overfishing of small fish in river water results in ....

a. fish scarcity
b. resource recovery
c. lack of fish quality
d. preserving fish

14. Ways to preserve the environment include ....

a. deforestation
b. removal of natural resources
c. rationalizing the consumption of natural resources
d. excessive use of natural resources

15. The .... is from the factors affecting sustainability.

a. climate
b. temperature
c. rain
d. population increase

16. .... causes soil pollution and the death of plants and animals.

a. Burning coal
b. Rain
c. Planting trees
d. Blowing wind

17. A .... is an area of land where all the water that flows across it drains downhill to a common location in one direction.

a. lake
b. watershed
c. pond
d. stream

18. Which of the following behaviors leads to wasting water?

a. Reducing bath time
b. Drip irrigation of gardens
c. Excessive irrigation of gardens
d. Closing the water tap while brushing your teeth

19. .... is the main engine of the water cycle in nature.

a. Human
b. Solar energy
c. Rain
d. Water treatment plant

20. All of the following bodies of water are freshwater, except ....

a. rivers
b. rain
c. seas
d. groundwater



21. All of the following are duties of wastewater treatment engineers, except ………………………… .
    - a. monitoring the water treatment process
    - b. removing harmful substances from water
    - c. designing bridges to facilitate transportation from cities
    - d. designing ways to protect a community from floods

22. All of the following are ways to conserve water, except ………………………… .
    - a. repairing leaky water tanks
    - b. turning off the tap while washing clothes
    - c. continuously using the shower for bathing
    - d. using small amounts of water when cleaning cars

23. Which of the following could lead to the destruction of renewable resources?
    - a. Dams construction
    - b. Deforestation
    - c. Resources protection
    - d. Resources sustainability

24. The most important sources of salt water are ………………………… .
    - a. seas and oceans
    - b. rivers and groundwater
    - c. rain and seas
    - d. lakes and rivers

25. We use ………………………… to purify unclean water.
    - a. desalination
    - b. natural reserves
    - c. solar panels
    - d. filters

26. Polluting of fresh water may cause ………………………… of animals.
    - a. diversity
    - b. growth
    - c. extinction
    - d. increasing

27. Which of the following behaviors leads to water waste?
    - a. Reducing bathing time
    - b. Irrigating gardens with drip irrigation
    - c. Overwatering gardens
    - d. Turning off the tap while brushing your teeth

28. To conserve renewable resources, we must ………………………… .
    - a. pollute water
    - b. pollute soil
    - c. pollute air
    - d. use resources sustainably

2 Put (✓) or (✗):

1. Water is used to transport goods. ( )
2. Ponds and swamps are groundwater. ( )
3. Reducing bathing time is a way to waste water. ( )
4. Wetlands are examples of salt water. ( )
5. All water sources on Earth are suitable for drinking. ( )
6. The water found slightly above Earth's surface level is known as oceans. ( )
7. Hunting is allowed in natural reserves. ( )
8. Downstream water increases when upstream water decreases. ( )
9. Clothes are made from plants and animals products. ( )
10. Deforestation destroys the natural habitats of many living organisms. ( )
11. Overfishing helps increase the number of fish in any body of water. ( )
12. Dumping factories waste in the water causes water pollution and makes it unfit for drinking. ( )
13. Water is a recyclable resource. ( )
14. Rivers are among the largest saltwater bodies. ( )
15. Dams are used to filter polluted water for reuse. ( )
16. Overconsumption of natural resources helps conserve them. ( )
17. Polluted water can be converted into clean water using water filters. ( )

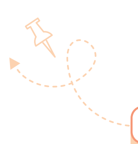
3 Correct the underlined words:

1. Most of the water on the Earth's surface is <u>fresh</u> water. (..........)
2. <u>Lakes</u> are a source of salty water, with floors that contain mountains and plains. (..........)
3. Ponds are a type of <u>estuary</u>. (..........)
4. <u>Rivers</u> are sources of salt water. (..........)
5. <u>Seas</u> surround the continents and connect them to each other. (..........)
6. <u>Estuaries</u> are considered one of the large bodies of water surrounded by land on all sides. (..........)

1. When building a factory close to a body of water, this **protects** the body. (................................)
2. **Estuaries** are tributaries that flow into bigger rivers, which lead to even bigger bodies of water. (................................)
3. Population growth **benefits** sustainability. (................................)
4. Plastic products are made from **cotton**. (................................)
5. Deforestation **improves** the natural habitats of living organisms. (................................)
6. The state provides natural **gardens** to protect endangered species. (................................)
7. Using a water filter leads to water **pollution**. (................................)
8. Water is one of the most important **industrial** resources on the Earth. (................................)
9. Water from the High Dam in Egypt is used to generate **thermal** energy. (................................)
10. Rivers are considered sources of **salt** water. (................................)
11. **Dams** are used to filter contaminated water for reuse. (................................)

4 Complete the following sentences:

1. The ecosystem consists of .... and ....
2. Water consumption can be rationalized by ....
3. At the floor of an ...., there are mountains and plains.
4. Most of the water on the Earth's surface is .... water.
5. Water is used in .... and ....
6. Reducing bathing time helps to .... water consumption.
7. The Wadi El-Hitan Reserve is located in ....
8. Poor water quality exposes many living organisms to the danger of ....
9. If the water at the upstream decreases, the water at the downstream will ....



10. Among the factors that affect sustainability are .... and ....

11. Excessive use of well water can lead to wells ....

12. The area where water collects from different sources and moves in one direction is a ....

13. .... is one of the factors affecting sustainability.

14. Water is considered one of the .... resources on the Earth's surface.

15. Floods occur when the amount of rainfall in rivers ....

16. A .... is used to convert polluted water into clean water.

17. Wastewater engineers in Egypt work in ....

18. Water can be controlled and conserved by ....

5 Write the scientific term:

1. It is the place where rivers meet seas or oceans and it is home to thousands of plants and animals. (..........................)

2. It is a large body of salt water and its floor has mountains and plains. (..........................)

3. It is the water found in the cracks and spaces of underground rocks. (..........................)

6 Write what the following statements mean:

1. It is using a resource in a way that does not negatively affect the future availability of that resource. (..............................)

2. It is restricting access and use of resources, (..............................)

3. It is the main engine of the water cycle in nature. (..............................)





7 Classify the following water sources according to their type:

Rivers - Oceans - Glaciers - Seas - Ponds - Streams - Estuaries - Swamps - Groundwater

Fresh Water	Salt Water	Mixture of Salt and Fresh Water
....	....	....
....	....	....
....	....	....

6 What happens if:

1. The amount of rain falling was very little?

....

2. The rainfall was more than the river could contain?

....

3. The cows started eating all the grass before the new grass grew?

....

4. The factory waste leaks in one of the small streams?

....

5. Well water is used more than is replenished by rainfall?

....

Pony Revision on Concept 4.1

Effects of Gravity

1 Choose the correct answer:

1. Objects move under the effect of two forces, which are ....
   a. pull and magnet b. pull and wind
   c. pull and push d. rotation and push
2. The force of .... holds objects on Earth.
   a. wind b. air resistance
   c. push d. gravity
3. The force of gravity causes ....
   a. the moon's revolution around Earth
   b. the Earth's revolution around the Sun
   c. Objects to fall towards Earth
   d. all of the previous answers
4. Which of the following objects has the greatest gravity?
   a. Earth b. The moon c. Jupiter d. The Sun
5. Which of the following causes an increase in the force of attraction between two objects?
   a. Increasing the distance between them
   b. Increasing their masses
   c. Decreasing their masses
   d. Increasing the force of friction
6. The force that returns the ball after it is thrown upward is the force of ....
   a. push b. friction c. gravity d. pull
7. If the distance between the Earth and the moon increases, the force of attraction between them will ....
   a. increase b. disappear
   c. decrease d. be unchanged
8. Magnetic force is considered a force of ....
   a. push only b. pull only
   c. friction d. push or pull
9. Gravity is considered a .... force.
   a. pushing b. friction c. visible d. pulling

10. When the .... of an object increases, its gravity increases.
   a. motion   b. mass   c. resistance   d. distance
11. A magnet pulls metal paperclips because of its ....
   a. gravitational force   b. wind
   c. air resistance   d. magnetic force
12. Planets revolve in fixed orbits around the Sun under the effect of the gravity of ....
   a. Earth   b. the moon   c. Jupiter   d. the Sun
13. When an object is thrown vertically upward, it ....
   a. moves at a great speed toward space
   b. floats in space due to the absence of gravity
   c. remains suspended because the gravity between it and Earth is equal
   d. returns to Earth under the effect of gravity
14. The force of .... is generated between two touching surfaces and slows the movement of objects.
   a. gravity   b. push   c. magnetism   d. friction
15. The force that returns a ball to the ground after it has been thrown upward is ....
   a. air resistance   b. frictional force
   c. gravitational force   d. magnetic force
16. .... pulls skydivers upward to slow their fall toward the ground.
   a. Frictional force   b. Magnetism
   c. Gravity   d. Air resistance

2 Put (✓) or (✗):

1. The Earth's gravity is greater than the moon's gravity. (   )
2. Whenever the mass of an object increases, its gravitational force decreases. (   )
3. Magnetic force is considered a pulling force only. (   )
4. The force of gravity exists only between objects in touch. (   )
5. Objects fall downward due to the frictional force. (   )

6. Gravity is considered a visible force, while magnetism is an invisible force. ( )
7. Friction increases the speed of an object. ( )
8. Air resistance does not decrease the speed of a moving object. ( )
9. Gravity affects the speed of planets revolution around the Sun. ( )
10. An orbit is a spherical shape in which the planets revolve around the Sun. ( )
11. Planets revolve around the Sun in fixed orbits under the effect of the Sun's gravity. ( )
12. Light objects reach the Earth faster than heavy objects in the absence of air resistance. ( )

3 Correct the underlined words:

1. The Moon's gravitational force is **greater** than Earth's gravitational force. (........................)
2. Earth's gravity causes objects to move **upward**. (........................)
3. When an object falls from a high place, it moves **upward**. (........................)
4. When the distance between two objects increases, the force of attraction between them **increases**. (........................)
5. The effect of gravity increases whenever an object is **raised above** Earth's surface. (........................)
6. Waterfalls flow from the top of a river to the bottom due to **air resistance** (........................)
7. Magnets attract **wooden** objects. (........................)
8. The force of gravity between two objects **increases** as the distance between them increases. (........................)
9. Air resistance affects an object which falling downward in **the same** direction of Earth's gravity. (........................)
10. The force that generated between two touching surfaces leads to slow the movement of object is known as **magnetism**. (........................)
11. **Earth** is the center of motion in the solar system. (........................)
12. magnet pulls metal paper clips due to the force of **gravity**. (........................)



4 Complete the following sentences:

1. Gravity is a type of ....
2. The Earth's gravitational force pulls objects ....
   ....
3. .... revolve around the Sun in a fixed orbit due to gravity.
4. When the distance between two objects decreases, the gravitational force between them ....
5. If the moon's mass increases, the gravitational force between it and Earth ....
6. If the distance between the moon and Earth increases, the gravity between them ....
7. Whenever the .... of an object increases, its gravity increases.
8. The force of gravity between two objects decreases as the .... between them increases.
9. Planets revolve around the Sun in a .... orbit.
10. Air resistance acts .... to the direction of Earth's gravity.
11. Magnets have a strong attraction to certain metals, such as ...., ..., and ....
12. .... holds objects on the Earth's surface.
13. The moon revolves in a fixed .... around the Earth due to Earth's ....
14. .... reduces the speed of an object's movement in the air.
15. Planets revolve in fixed orbits due to the effect of .... gravity.
16. Magnets attract some metals, such as ....

5 Write what the following statements mean:

1. It is a force of attraction between two objects with mass. (....)
2. It is a type of frictional force generating from the movement of an object in the air. (....)
3. It includes the Sun and the planets that revolve around it. (....)
4. It is a force generated between two touching surfaces, leading to slowing the movement of the object. (....)



6 Give reasons for:

1. Objects on the Earth's surface will remain stable.

....

....

2. The moon revolves around Earth in a fixed orbit.

....

....

3. The moon's gravity is less than Earth's gravity.

....

4. The Sun is the center of motion in the solar system.

....

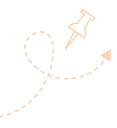
....

5. Earth's gravity is stronger than the moon's gravity.

....

6. The moon revolves around Earth in a fixed orbit.

....



Pony Revision on Unit 4 – Concept 2

Patterns of Motion in the Sky

Weeks
11 -12 - 13

1 Choose the correct answer:

1. .... is the fastest rotating planet around its axis in the solar system.
   a. Earth b. Jupiter c. Mercury d. Venus
2. The Earth rotates once on its axis every ....
   a. 24 hours b. 12 hours c. 24 days d. 365 days
3. The Earth's rotation around its axis causes ....
   a. the seasons b. the occurrence of spring
   c. day and night d. increasing gravity
4. The Earth moves around ....
   a. the Sun only b. moon
   c. its axis only d. its axis and the Sun
5. As the Earth rotates around its axis, the half of the Earth facing the Sun is ....
   a. night b. summer c. day d. winter
6. The imaginary line that passes through the Earth from the North Pole to the South Pole is called the ....
   a. equator b. orbit
   c. Earth's axis d. constellation
7. Day and night phenomenon occurs because the Earth rotates around ....
   a. the Sun b. the moon c. Jupiter d. its axis
8. The Sun is considered a medium-sized ....
   a. comet b. planet c. meteoroid d. star
9. A group of stars that looks like a certain shape in the sky is called ....
   a. solar system b. constellation c. Earth's axis d. Sundial
10. The length and angle of the shadow change depending on the position of the .... in the sky.
    a. Sun b. moon c. stars d. clouds

11. New stars appear every night from the .... direction.
   a. north   b. south   c. east   d. west
12. Orion is an example of .... in the sky.
   a. planets   b. constellations
   c. glaciers   d. telescopes
13. In the morning, a person's shadow is ....
   a. short   b. non-existant   c. above him   d. long
14. The closest star to Earth is ....
   a. Venus   b. the moon   c. Jupiter   d. the Sun
15. The difference in the shape of the moon during its revolution around Earth is known as ....
   a. starlight   b. Earth's cycle
   c. the pole star   d. moon's phases
16. In the middle of the lunar month, the moon appears as a ....
   a. Crescent   b. Full Moon   c. New Moon   d. Gibbous
17. The moon reflects the light of the .... falling on it.
   a. planets   b. Earth   c. Sun   d. stars
18. Stars make their own light because they are made of hot .... , which make them shine bright.
   a. rocks   b. gases   c. sands   d. metals
19. In the planetarium, you see pictures of ....
   a. stars and planets   b. constellations
   c. celestial bodies   d. all the previous

2 Put (✓) or (✗):

1. The Earth rotates around its axis once every hour. (   )
2. The Sun seems like it is moving in the sky. (   )
3. The fastest rotating planet around the Earth is Jupiter. (   )
4. The phenomenon of day and night occurs once every year. (   )
5. The planets of the solar system rotate around the Sun at similar speeds. (   )
6. The rotation of the Earth around the Sun causes day and night cycle. (   )

7. Comets and meteors cannot be seen with the naked eye. ( )
8. The Sun is the only star in the solar system. ( )
9. The atmosphere allows some light waves to pass through it. ( )
10. Astronauts can be sent to explore distant stars. ( )
11. Different star clusters can be observed more in the summer than in the winter. ( )
12. A group of stars that looks like a certain shape in the sky is called a constellation. ( )
13. The moon appears fully illuminated at the beginning of the lunar month. ( )
14. The shape of the moon varies throughout the lunar month. ( )
15. The moon revolves around the Earth in a circular path. ( )
16. The moon reflects light, so we see it illuminated in the sky. ( )
17. The New Moon is one of the phases of the moon where the apparent face of the moon to the Earth is fully illuminated. ( )

3 Correct the underlined words:

1. The Earth rotates around its axis **horizontally**. (..............................)
2. The cycle of day and night occurs due to the Earth's rotation around the **Sun**. (..............................)
3. **Mars** is the fastest rotating planet in the solar system. (..............................)
4. One side of the Earth facing the Sun during the Earth's rotation around its axis causing **night**.
5. Earth completes one rotation on its axis in **365 days**. (..............................)
6. One side of the Earth is away from the Sun during the Earth's rotation around its axis, causing **day**. (..............................)
7. We use tools such as **microscopes** to study celestial objects. (..............................)
8. The atmosphere acts as a protective layer surrounding the Earth planet because it **forms clouds**. (..............................)

9. The Sun's changing position in the sky throughout the day causes the length of shadow to be **similar**. (..................)
10. The closest star to the Earth is **Jupiter**. (..................)
11. Constellations are most visible in the **spring**. (..................)
12. **Engineers** are responsible for operating the planetarium. (..................)
13. Stars near the poles rotate very **rapidly**. (..................)

4 Complete the following sentences:

1. The planets of the solar system rotate around the Sun at .... speeds.
2. The Earth rotates around its axis in .... clockwise direction.
3. As the Earth rotates around its axis, the side faces the Sun is ....
4. The imaginary line passing through the Earth from the North Pole to the South Pole is called ....
5. The phenomenon of .... occurs due to the Earth's rotation around its axis.
6. The fastest rotating planet in the solar system is ....
7. Stars are made of ....
8. An example of binoculars is ....
9. The length of the shadow during the .... time is shorter than the other times.
10. Some celestial bodies such as .... can be seen with the naked eye.
11. The length of the shadow varies depending on the position of the .... in the sky.
12. Binoculars and telescopes are tools used to ....
13. The Sun is a .... sized star relative to other stars.
14. The moon revolves around the Earth in an .... orbit.
15. The moon is named .... at the beginning of the lunar month.
16. Stars make their own light because they are made of ....
17. The alternation of night and day occurs as a result of the Earth's rotation around ....



18. The moon face facing Earth is completely dark during the .... of the lunar month.
19. When the moon is in the middle of a lunar month, it is called a ....
20. The moon appears bright in the sky due to the reflection of .... on the moon's surface.
21. The side of the moon facing the Earth is completely dark in the .... of the lunar month.

5 Write the scientific term

1. It is the fastest rotating planet in the solar system. (..................................)
2. It is an imaginary line passing through the Earth from the North Pole to the South Pole. (..................................)
3. It is a phenomenon that occurs due to the Earth's rotation around its axis. (..................................)
4. It is a group of stars that looks like a certain shape in the sky. (..................................)
5. They are giant celestial bodies composed of gases. (..................................)
6. The moon has different shapes through a full lunar month. (..................................)
7. It is a phase of the moon in which the side of the moon facing Earth is completely dark. (..................................)
8. It appears in the middle of the month, when the side of the moon facing Earth is fully illuminated. (..................................)

6 Give reasons for the following:

1. The sequence of night and day occurs.

....

2. We do not feel the movement of Earth and it seems like it is standing still.

....

3. The Sun appears to us much larger than other stars.

....

4. The lengths and angles of shadows vary throughout the day.

....



5. The moon looks bright in the sky.

....

6. The occurrence of the phases of the moon occur.

....

7. The moon appears in different shapes during the lunar month.

....

7 What happens if:

– The Earth stopped rotating on its axis?

....

8 Answer the following questions:

1. Why don't we send astronauts to explore the stars?

....

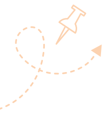
2. Mention a device used to observe celestial bodies.

....

3. What is meant by the pole stars?

....

....



Pony Revision on Unit 3 – Concept 1

Biosphere and Hydrosphere Interaction

Weeks
1 - 2 - 3

1 Choose the correct answer:

1. Water covers approximately .... % of the Earth's surface.
   a. 10 b. 30 c. 50 d. **70**
2. .... makes up most of the planet Earth.
   a. Land b. Oxygen gas c. **Water** d. Mountain
3. The total amount of water on Earth ....
   a. decreases b. increases c. changes d. **does not change**
4. Plants need water to perform the process of ....
   a. growth b. respiration c. combustion d. **photosynthesis**
5. The Earth's hydrosphere contains ....
   a. air b. soil c. **rivers** d. humans
6. The .... belong to the geosphere.
   a. gases b. **minerals** c. snakes d. rivers
7. The hydrosphere contains all the following, except ....
   a. rivers b. **air** c. seas d. oceans
8. The geosphere contains all the following, except ....
   a. minerals b. rocks c. **oxygen** d. soil
9. Rivers are considered a part of the ....
   a. biosphere b. **hydrosphere** c. atmosphere d. geosphere
10. Tree leaves are parts of the ....
    a. geosphere b. hydrosphere c. **biosphere** d. atmosphere
11. A body of water surrounded by land on all sides is known as ....
    a. a river b. a sea c. **a lake** d. groundwater
12. Water that flows from an area of higher altitude to an area of lower altitude in a definite path is known as ....
    a. an ocean b. **a river** c. a sea d. a lake

13. When plants decompose in the soil, the interaction is between ....
   a. the geosphere and the hydrosphere
   b. the hydrosphere and the biosphere
   c. **the biosphere and the geosphere**
   d. the atmosphere and the hydrosphere

14. When living organisms breathe, an interaction occurs between ....
   a. the biosphere and the geosphere
   b. the atmosphere and the hydrosphere
   c. **the biosphere and the atmosphere**
   d. the geosphere and the hydrosphere

15. The percentage of salt water represents about ....% of the Earth's water.
   a. 3.5   b. 30   c. 70   d. **96.5**

16. The .... is considered from the examples of organisms that live in water streams.
   a. dolphin   b. whale   c. starfish   d. **salmon**

17. Frogs live in ....
   a. lakes   b. **ponds**   c. seas   d. oceans

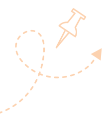
18. Salty water is found in all of the following bodies of water, except ....
   a. lakes   b. seas   c. **rivers**   d. oceans

19. Most fresh water is found in the .... form.
   a. liquid   b. **frozen**   c. gaseous   d. still

20. .... are the largest saltwater ecosystems.
   a. Ponds   b. Rivers   c. Lakes   d. **Oceans**

21. Water that seeps under the Earth's surface through porous rocks is known as ....
   a. lakes   b. **groundwater**   c. ponds   d. water streams

22. Ponds are characterized by .... water.
   a. fast-flowing   b. very salty   c. **still**   d. salty





2 Put (✓) or (✗):

1. Water is used only for drinking. (✗)
2. A plant cannot grow without water. (✓)
3. Living organisms need water to survive. (✓)
4. The components of the ecosystem do not interact with each other. (✗)
5. Groundwater is found above the surface of the Earth. (✗)
6. All living organisms belong to the atmosphere. (✗)
7. The glacier is considered a part of the geosphere. (✗)
8. Air represents the atmosphere in the Earth's systems. (✓)
9. The oceans contain a large amount of fresh water. (✗)
10. The phenomenon of erosion by sea waves is an example of the interaction of the geosphere with the hydrosphere. (✓)
11. A lake's water is always fresh. (X)
12. Glaciers represent most of the fresh water on Earth. (✓)
13. Groundwater is found in the depths of the oceans. (X)
14. Oceans contain a large amount of fresh water. (X)
15. Coral reefs are examples of saltwater ecosystems. (✓)
16. Lake Nasser and Lake Bardawil are examples of salty lakes in Egypt. (X)

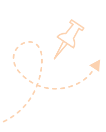
3 Correct the underlined words:

1. Water turns from the solid state to the liquid state by <u>cooling</u>. (heating)
2. Human is part of the <u>hydrosphere</u>. (biosphere)
3. Plants need water to do the process of <u>reproduction</u>. (photosynthesis)
4. Water covers about <u>50%</u> of the Earth's surface. (71%)
5. Water turns into ice by <u>heating</u>. (cooling)
6. The total amount of water on Earth <u>changes</u>. (doesn't change)
7. Lake Assal is one of the <u>fresh</u> water lakes. (salty)
8. Pond water is characterized by <u>fast-flowing</u> water. (still)
9. <u>Salamanders</u> live in the oceans. (Dolphins)
10. <u>Freshwater</u> ecosystems cover a large portion of the Earth. (Saltwater)

11. 3.5% of the water on Earth's surface is <u>salty</u>. **(fresh)**
12. Water lilies live in <u>sea water</u>. **(ponds)**

4 Complete the following sentences:

1. The ecosystem consists of **living things** and **non-living things**.
2. From the components of the **atmosphere** are oxygen and nitrogen.
3. The **biosphere** contains animals, birds, and fish.
4. Water turns into steam by **evaporation (heating)**.
5. Water represents **71% (the hydrosphere)** of the Earth.
6. Living organisms represent the **biosphere** of the Earth.
7. Water turns from a liquid to a solid by **cooling (freezing)**.
8. An ecosystem consists of **living things** and non-living things.
9. The glacier is considered part of the **hydrosphere**.
10. The winds that move objects are part of the **atmosphere**.
11. The phenomenon of erosion is an example of the interaction of the **hydrosphere** with the **geosphere**.
12. Rocks and minerals are components of the **geosphere**.
13. Water turns from a solid to a liquid by **melting (heating)**.
14. Rivers belong to the **hydrosphere**, while human is part of the **biosphere**.
15. Whales live in **salt** water.
16. Nasser Lake represents a **fresh** water ecosystem.
17. Lake **Bardawil** is one of the salty lakes in Egypt.
18. The shallow areas of saltwater ecosystems include **coral reefs** and **intertidal zones**.
19. **Salmon** is considered one of the living organisms that live in water streams.
20. Water lilies grow in **pond still** water.
21. One of the fresh lakes in Egypt is **Lake Nasser**.





5 Write the scientific term:

1. It is the sphere that contains air and various gases. **(Atmosphere)**
2. It is the sphere that contains all living organisms. **(Biosphere)**
3. It is the sphere that contains rocks, minerals, and soil. **(Geosphere)**
4. It is an area characterized by greenery, soil, climate, and wildlife that distinguish it from other areas. **(Biome)**
5. It is the water found under the surface of the Earth, seeping through porous rocks. **(Groundwater)**

6 What is meant by the following:

1. The groundwater

   It is the water that lies under the Earth's surface due to leakage of water through a layer of porous rock.

2. The river

   It is a body of water that always flows from an area of a higher altitude to an area of a lower altitude in a definite path.

3. The lake

   It is body of water that is surrounded by land.

7 Mention the Earth's interacting systems in the following sentences:

1. Earthworms live in the soil and make it a shelter for them.

   Biosphere and geosphere

2. Rocks and soil move when water flows.

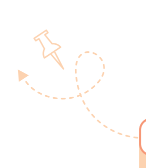
   Geosphere and hydrosphere

3. Plants absorb carbon dioxide during the process of photosynthesis.

   Biosphere and atmosphere

4. Plants need water to grow. **Biosphere and hydrosphere**
5. Living organisms exchange gases with the air during respiration.

   Biosphere and atmosphere



8 What are the uses of water in our lives:

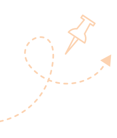
Preparing food – Bathing – Cleaning – Traveling – Manufacturing – Recreation

9 Give reasons for the following:

1. Water is important for the life of living organisms.
   ① Humans and animals drink water to survive.
   ② Plants need water to grow.
   ③ Some animals and plants live in water.
2. Water is considered a renewable resource.
   Because water can be replaced (renewed) during the water cycle.
3. Plants are considered a renewable resource.
   Because plants can be planted from seeds that grow up forming new plants.
4. Scientists use the word sphere to name each of the Earth's systems.
   Because the shape of the Earth looks like a sphere.
5. Jellyfish cannot live in ponds.
   Because jelly fish can survive only in salty water.
6. Fish do not live in Lake Assal.
   Because it has a high concentration of natural salts.
7. Whales live in oceans.
   Because whales can survive only in salty water.

10 What happens if:

1. Water changes from one state to another in relation to its total quantity?
   The total amount of water on Earth doesn't change.
2. Water disappears from the surface of the Earth?
   All living organisms will die.



Pony Revision on Unit 3 – Concept 2

Water As a Valuable Natural Resource

1 Choose the correct answer:

1. A/An .... is known as the place where the river meets the sea.
   a. wetland b. **estuary** c. sea d. ocean
2. .... are defined as above-ground land areas that are partially covered with water.
   a. Rivers b. Oceans c. Seas d. **Wetlands**
3. The water stored in the cracks and spaces of underground rocks is called ....
   a. lakes b. **groundwater** c. seas d. oceans
4. .... are considered sources of fresh water.
   a. Estuaries b. **Rivers** c. Oceans d. Seas
5. Swamps are considered one of the ....
   a. lakes b. seas c. rivers d. **wetlands**
6. .... is/are among the sources of salt water on Earth.
   a. Rivers b. Wetlands c. **Seas** d. Groundwater
7. .... contain fresh water.
   a. **Ponds** b. Estuaries c. Seas d. Oceans
8. .... are formed when salty sea water meets fresh river water.
   a. Lakes b. Wetlands c. **Estuaries** d. Water streams
9. The .... is considered the largest body of water and contains salty water.
   a. swamp b. river c. **ocean** d. estuary
10. Ways to protect natural resources include ....
    a. pollution b. deforestation
    c. sustainability d. overfishing
11. A watershed is an area where water collects from .... and flows in one direction.
    a. one source b. rain only
    c. different sources d. lakes only

12. Paper is made from ....

a. iron　　b. plastic　　c. copper　　**d. tree**

13. Overfishing of small fish in river water results in ....

a. fish scarcity　　b. resource recovery

c. lack of fish quality　　d. preserving fish

14. Ways to preserve the environment include ....

a. deforestation

b. removal of natural resources

c. rationalizing the consumption of natural resources

d. excessive use of natural resources

15. The .... is from the factors affecting sustainability.

a. climate　　b. temperature

c. rain　　**d. population increase**

16. .... causes soil pollution and the death of plants and animals.

a. Burning coal　　b. Rain

c. Planting trees　　d. Blowing wind

17. A .... is an area of land where all the water that flows across it drains downhill to a common location in one direction.

a. lake　　**b. watershed**　　c. pond　　d. stream

18. Which of the following behaviors leads to wasting water?

a. Reducing bath time

b. Drip irrigation of gardens

c. Excessive irrigation of gardens

d. Closing the water tap while brushing your teeth

19. .... is the main engine of the water cycle in nature.

a. Human

b. Solar energy

c. Rain

d. Water treatment plant

20. All of the following bodies of water are freshwater, except ....

a. rivers　　b. rain

c. seas　　d. groundwater



21. All of the following are duties of wastewater treatment engineers, except ....

a. monitoring the water treatment process

b. removing harmful substances from water

c. designing bridges to facilitate transportation from cities

d. designing ways to protect a community from floods

22. All of the following are ways to conserve water, except ....

a. repairing leaky water tanks

b. turning off the tap while washing clothes

c. continuously using the shower for bathing

d. using small amounts of water when cleaning cars

23. Which of the following could lead to the destruction of renewable resources?

a. Dams construction

b. Deforestation

c. Resources protection

d. Resources sustainability

24. The most important sources of salt water are ....

a. seas and oceans

b. rivers and groundwater

c. rain and seas

d. lakes and rivers

25. We use .... to purify unclean water.

a. desalination

b. natural reserves

c. solar panels

d. filters

26. Polluting of fresh water may cause .... of animals.

a. diversity

b. growth

c. extinction

d. increasing

27. Which of the following behaviors leads to water waste?

a. Reducing bathing time

b. Irrigating gardens with drip irrigation

c. Overwatering gardens

d. Turning off the tap while brushing your teeth

28. To conserve renewable resources, we must ....

a. pollute water

b. pollute soil

c. pollute air

d. use resources sustainably

2 Put (✓) or (✗):

1. Water is used to transport goods. (✓)
2. Ponds and swamps are groundwater. (✗)
3. Reducing bathing time is a way to waste water. (✗)
4. Wetlands are examples of salt water. (✗)
5. All water sources on Earth are suitable for drinking. (✗)
6. The water found slightly above Earth's surface level is known as oceans. (✗)
7. Hunting is allowed in natural reserves. (✗)
8. Downstream water increases when upstream water decreases. (✗)
9. Clothes are made from plants and animals products. (✓)
10. Deforestation destroys the natural habitats of many living organisms. (✓)
11. Overfishing helps increase the number of fish in any body of water. (✗)
12. Dumping factories waste in the water causes water pollution and makes it unfit for drinking. (✓)
13. Water is a recyclable resource. (✓)
14. Rivers are among the largest saltwater bodies. (✗)
15. Dams are used to filter polluted water for reuse. (✗)
16. Overconsumption of natural resources helps conserve them. (✗)
17. Polluted water can be converted into clean water using water filters. (✓)

3 Correct the underlined words:

1. Most of the water on the Earth's surface is fresh water. (salt)
2. Lakes are a source of salty water, with floors that contain mountains and plains. (Oceans)
3. Ponds are a type of estuary. (wetland)
4. Rivers are sources of salt water. (Oceans)
5. Seas surround the continents and connect them to each other. (Oceans)
6. Estuaries are considered one of the large bodies of water surrounded by land on all sides. (Lakes)





7. When building a factory close to a body of water, this **protects** the body. (**pollutes**)
8. **Estuaries** are tributaries that flow into bigger rivers, which lead to even bigger bodies of water. (**Small creeks and streams**)
9. Population growth **benefits** sustainability. (**harms**)
10. Plastic products are made from **cotton**. (**oil**)
11. Deforestation **improves** the natural habitats of living organisms. (**harms/damages/destroys**)
12. The state provides natural **gardens** to protect endangered species. (**protectorates**)
13. Using a water filter leads to water **pollution**. (**filtration**)
14. Water is one of the most important **industrial** resources on the Earth. (**renewable**)
15. Water from the High Dam in Egypt is used to generate **thermal** energy. (**electrical**)
16. Rivers are considered sources of **salt** water. (**fresh**)
17. **Dams** are used to filter contaminated water for reuse. (**Water filters**)
18. The Wadi El-Hitan Reserve is located in **Fayoum**.
19. Poor water quality exposes many living organisms to the danger of **extinction**.
20. If the water at the upstream decreases, the water at the downstream will **decrease**.
21. Among the factors that affect sustainability are **overpopulation** and **pollution**.
22. Excessive use of well water can lead to wells **drying up**.
23. The area where water collects from different sources and moves in one direction is a **watershed**.
24. **Pollution** is one of the factors affecting sustainability.
25. Water is considered one of the **renewable** resources on the Earth's surface.
26. Floods occur when the amount of rainfall in rivers **increases**.

27. A **water filter** is used to convert polluted water into clean water.
28. Wastewater engineers in Egypt work in **Bahr Al-Baqar Wastewater Treatment Plant**.
29. Water can be controlled and conserved by **building dams**.

4 Complete the following sentences:

1. The ecosystem consists of **living organisms** and **non-living things**.
2. Water consumption can be rationalized by **taking a quick shower**.
3. At the floor of an **ocean**, there are mountains and plains.
4. Most of the water on the Earth's surface is **salt** water.
5. Water is used in **drinking** and **fishing**.
6. Reducing bathing time helps to **decrease** water consumption.

5 Write the scientific term:

1. It is the place where rivers meet seas or oceans and it is home to thousands of plants and animals. **(An estuary)**
2. It is a large body of salt water and its floor has mountains and plains. **(Ocean)**
3. It is the water found in the cracks and spaces of underground rocks. **(Groundwater)**

6 Write what the following statements mean:

1. It is using a resource in a way that does not negatively affect the future availability of that resource. (**Sustainability**)
2. It is restricting access and use of resources, (**Preservation**)
3. It is the main engine of the water cycle in nature. (**Solar energy – The Sun**)





7 **Classify the following water sources according to their type:**

Rivers - Oceans - Glaciers - Seas - Ponds - Streams - Estuaries - Swamps - Groundwater

Fresh Water	Salt Water	Mixture of Salt and Fresh Water
Rivers - Glaciers - Ponds - Streams - Swamps - Groundwater	**Oceans - Seas**	**Estuaries**

6 **What happens if:**

1. The amount of rain falling was very little?
   The water level will decrease, causing drought.
2. The rainfall was more than the river could contain?
   The water level will rise, causing flooding.
3. The cows started eating all the grass before the new grass grew?
   The grass will disappear and cows will be hungry.
4. The factory waste leaks in one of the small streams?
   It will pollute the water of the tributaries connected to this small stream.
5. Well water is used more than is replenished by rainfall?
   The well will dry up.

Pony Revision on Concept 4.1

Effects of Gravity

1 Choose the correct answer:

1. Objects move under the effect of two forces, which are ....
   a. pull and magnet
   b. pull and wind
   c. pull and push
   d. rotation and push
2. The force of .... holds objects on Earth.
   a. wind
   b. air resistance
   c. push
   d. gravity
3. The force of gravity causes ....
   a. the moon's revolution around Earth
   b. the Earth's revolution around the Sun
   c. Objects to fall towards Earth
   d. all of the previous answers
4. Which of the following objects has the greatest gravity?
   a. Earth
   b. The moon
   c. Jupiter
   d. The Sun
5. Which of the following causes an increase in the force of attraction between two objects?
   a. Increasing the distance between them
   b. Increasing their masses
   c. Decreasing their masses
   d. Increasing the force of friction
6. The force that returns the ball after it is thrown upward is the force of ....
   a. push
   b. friction
   c. gravity
   d. pull
7. If the distance between the Earth and the moon increases, the force of attraction between them will ....
   a. increase
   b. disappear
   c. decrease
   d. be unchanged
8. Magnetic force is considered a force of ....
   a. push only
   b. pull only
   c. friction
   d. push or pull
9. Gravity is considered a .... force.
   a. pushing
   b. friction
   c. visible
   d. pulling

10. When the .... of an object increases, its gravity increases.
    a. motion **b. mass** c. resistance d. distance

11. A magnet pulls metal paperclips because of its ....
    a. gravitational force b. wind
    c. air resistance **d. magnetic force**

12. Planets revolve in fixed orbits around the Sun under the effect of the gravity of ....
    a. Earth b. the moon c. Jupiter **d. the Sun**

13. When an object is thrown vertically upward, it ....
    a. moves at a great speed toward space
    b. floats in space due to the absence of gravity
    c. remains suspended because the gravity between it and Earth is equal
    d. returns to Earth under the effect of gravity

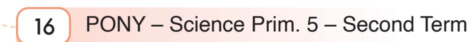
14. The force of .... is generated between two touching surfaces and slows the movement of objects.
    a. gravity b. push c. magnetism **d. friction**

15. The force that returns a ball to the ground after it has been thrown upward is ....
    a. air resistance b. frictional force
    c. gravitational force d. magnetic force

16. .... pulls skydivers upward to slow their fall toward the ground.
    a. Frictional force b. Magnetism
    c. Gravity **d. Air resistance**

2 Put (✓) or (✗):

1. The Earth's gravity is greater than the moon's gravity. (✓)
2. Whenever the mass of an object increases, its gravitational force decreases. (✗)
3. Magnetic force is considered a pulling force only. (✗)
4. The force of gravity exists only between objects in touch. (✗)
5. Objects fall downward due to the frictional force. (✗)



6. Gravity is considered a visible force, while magnetism is an invisible force. (✗)
7. Friction increases the speed of an object. (✗)
8. Air resistance does not decrease the speed of a moving object. (✗)
9. Gravity affects the speed of planets revolution around the Sun. (✓)
10. An orbit is a spherical shape in which the planets revolve around the Sun. (✗)
11. Planets revolve around the Sun in fixed orbits under the effect of the Sun's gravity. (✓)
12. Light objects reach the Earth faster than heavy objects in the absence of air resistance. (✗)

3 Correct the underlined words:

1. The Moon's gravitational force is **greater** than Earth's gravitational force. (**less**)
2. Earth's gravity causes objects to move **upward**. (**downward**)
3. When an object falls from a high place, it moves **upward**. (**downward**)
4. When the distance between two objects increases, the force of attraction between them **increases**. (**decrease**)
5. The effect of gravity increases whenever an object is **raised above** Earth's surface. (**near**)
6. Waterfalls flow from the top of a river to the bottom due to **air resistance** (**gravity**)
7. Magnets attract **wooden** objects. (**Metal**)
8. The force of gravity between two objects **increases** as the distance between them increases. (**Decrease**)
9. Air resistance affects an object which falling downward in **the same** direction of Earth's gravity. (**opposite**)
10. The force that generated between two touching surfaces leads to slow the movement of object is known as **magnetism**. (**Friction force**)
11. **Earth** is the center of motion in the solar system. (**Sun**)
12. magnet pulls metal paper clips due to the force of **gravity**. (**Magnetism**)





4 Complete the following sentences:

1. Gravity is a type of **pulling force**.
2. The Earth's gravitational force pulls objects **down towards the center of the Earth**.
3. **Planets** revolve around the Sun in a fixed orbit due to gravity.
4. When the distance between two objects decreases, the gravitational force between them **increases**.
5. If the moon's mass increases, the gravitational force between it and Earth **increases**.
6. If the distance between the moon and Earth increases, the gravity between them **decreases**.
7. Whenever the **mass** of an object increases, its gravity increases.
8. The force of gravity between two objects decreases as the **distance** between them increases.
9. Planets revolve around the Sun in a **fixed** orbit.
10. Air resistance acts **opposite** to the direction of Earth's gravity.
11. Magnets have a strong attraction to certain metals, such as **iron**, **cobalt**, and **nickel**.
12. **Gravity** holds objects on the Earth's surface.
13. The moon revolves in a fixed **orbit** around the Earth due to Earth's **gravity**.
14. **Air resistance** reduces the speed of an object's movement in the air.
15. Planets revolve in fixed orbits due to the effect of **the Sun's** gravity.
16. Magnets attract some metals, such as **iron**.

5 Write what the following statements mean:

1. It is a force of attraction between two objects with mass. (**Gravity**)
2. It is a type of frictional force generating from the movement of an object in the air. (**Air resistance**)
3. It includes the Sun and the planets that revolve around it. (**Solar System**)
4. It is a force generated between two touching surfaces, leading to slowing the movement of the object. (**Friction force**)

6 Give reasons for:

1. Objects on the Earth's surface will remain stable.

   Because of the Earth's gravity that attracts all objects toward the Earth's center.

2. The moon revolves around Earth in a fixed orbit.

   Because of Earth's gravity that keeps the moon in a fixed orbit around Earth.

3. The moon's gravity is less than Earth's gravity.

   Because the mass of Earth is greater than the mass of the moon.

4. The Sun is the center of motion in the solar system.

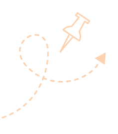
   Because the Sun has the biggest mass, so it has the greatest gravitational force, which attracts all planets in the solar system.

5. Earth's gravity is stronger than the moon's gravity.

   Because the mass of Earth is greater than the mass of the moon.

6. The moon revolves around Earth in a fixed orbit.

   Because of Earth's gravity.



Pony Revision on Unit 4 – Concept 2

Patterns of Motion in the Sky

Weeks
11 -12 - 13

1 Choose the correct answer:

1. .... is the fastest rotating planet around its axis in the solar system.
   a. Earth b. **Jupiter** c. Mercury d. Venus
2. The Earth rotates once on its axis every ....
   a. **24 hours** b. 12 hours c. 24 days d. 365 days
3. The Earth's rotation around its axis causes ....
   a. the seasons b. the occurrence of spring
   c. **day and night** d. increasing gravity
4. The Earth moves around ....
   a. the Sun only b. moon
   c. its axis only d. **its axis and the Sun**
5. As the Earth rotates around its axis, the half of the Earth facing the Sun is ....
   a. night b. summer c. **day** d. winter
6. The imaginary line that passes through the Earth from the North Pole to the South Pole is called the ....
   a. equator b. orbit
   c. **Earth's axis** d. constellation
7. Day and night phenomenon occurs because the Earth rotates around ....
   a. the Sun b. the moon c. Jupiter d. **its axis**
8. The Sun is considered a medium-sized ....
   a. comet b. planet c. meteoroid d. **star**
9. A group of stars that looks like a certain shape in the sky is called ....
   a. solar system b. **constellation** c. Earth's axis d. Sundial
10. The length and angle of the shadow change depending on the position of the .... in the sky.
    a. **Sun** b. moon c. stars d. clouds

11. New stars appear every night from the .... direction.

a. north b. south c. **east** d. west

12. Orion is an example of .... in the sky.

a. planets b. **constellations**
c. glaciers d. telescopes

13. In the morning, a person's shadow is ....

a. short b. non-existant c. above him d. **long**

14. The closest star to Earth is ....

a. Venus b. the moon c. Jupiter d. **the Sun**

15. The difference in the shape of the moon during its revolution around Earth is known as ....

a. starlight b. Earth's cycle
c. the pole star d. **moon's phases**

16. In the middle of the lunar month, the moon appears as a ....

a. Crescent b. **Full Moon** c. New Moon d. Gibbous

17. The moon reflects the light of the .... falling on it.

a. planets b. Earth c. **Sun** d. stars

18. Stars make their own light because they are made of hot .... , which make them shine bright.

a. rocks b. **gases** c. sands d. metals

19. In the planetarium, you see pictures of ....

a. stars and planets b. constellations
c. celestial bodies d. **all the previous**

2 Put (✓) or (✗):

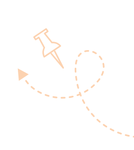
1. The Earth rotates around its axis once every hour. (✗)
2. The Sun seems like it is moving in the sky. (✓)
3. The fastest rotating planet around the Earth is Jupiter. (✗)
4. The phenomenon of day and night occurs once every year. (✗)
5. The planets of the solar system rotate around the Sun at similar speeds. (✗)



6. The rotation of the Earth around the Sun causes day and night cycle. (✗)
7. Comets and meteors cannot be seen with the naked eye. (✓)
8. The Sun is the only star in the solar system. (✓)
9. The atmosphere allows some light waves to pass through it. (✓)
10. Astronauts can be sent to explore distant stars. (✗)
11. Different star clusters can be observed more in the summer than in the winter. (✗)
12. A group of stars that looks like a certain shape in the sky is called a constellation. (✓)
13. The moon appears fully illuminated at the beginning of the lunar month. (✗)
14. The shape of the moon varies throughout the lunar month. (✓)
15. The moon revolves around the Earth in a circular path. (✗)
16. The moon reflects light, so we see it illuminated in the sky. (✓)
17. The New Moon is one of the phases of the moon where the apparent face of the moon to the Earth is fully illuminated. (✗)

3 Correct the underlined words:

1. The Earth rotates around its axis **horizontally**. (**vertically**)
2. The cycle of day and night occurs due to the Earth's rotation around the **Sun**. (**it's axis**)
3. **Mars** is the fastest rotating planet in the solar system. (**Jupiter**)
4. One side of the Earth facing the Sun during the Earth's rotation around its axis causing **night**.
5. Earth completes one rotation on its axis in **365 days**. (**24 hours or one day**)
6. One side of the Earth is away from the Sun during the Earth's rotation around its axis, causing **day**. (**night**)
7. We use tools such as **microscopes** to study celestial objects. (**telescopes**)



8. The atmosphere acts as a protective layer surrounding the Earth planet because it **forms clouds**. (**blocks some light waves**)
9. The Sun's changing position in the sky throughout the day causes the length of shadow to be **similar**. (**different**)
10. The closest star to the Earth is **Jupiter**. (**Sun**)
11. Constellations are most visible in the **spring**. (**winter**)
12. **Engineers** are responsible for operating the planetarium. (**Planetarium directors**)
13. Stars near the poles rotate very **rapidly**. (**slowly**)

4 Complete the following sentences:

1. The planets of the solar system rotate around the Sun at **different** speeds.
2. The Earth rotates around its axis in **counter** clockwise direction.
3. As the Earth rotates around its axis, the side faces the Sun is **day**.
4. The imaginary line passing through the Earth from the North Pole to the South Pole is called **Earth's axis**.
5. The phenomenon of **day and night** occurs due to the Earth's rotation around its axis.
6. The fastest rotating planet in the solar system is **Jupiter**.
7. Stars are made of **super-hot gases**.
8. An example of binoculars is **Galileo Binoculars**.
9. The length of the shadow during the **noon** time is shorter than the other times.
10. Some celestial bodies such as **stars** can be seen with the naked eye.
11. The length of the shadow varies depending on the position of the **Sun** in the sky.
12. Binoculars and telescopes are tools used to **see distant celestial bodies in more details**.
13. The Sun is a **medium** sized star relative to other stars.
14. The moon revolves around the Earth in an **elliptical** orbit.
15. The moon is named **First Crescent** at the beginning of the lunar month.





16. Stars make their own light because they are made of **hot gases**.
17. The alternation of night and day occurs as a result of the Earth's rotation around **its axis**.
18. The moon face facing Earth is completely dark during the **last day** of the lunar month.
19. When the moon is in the middle of a lunar month, it is called a **Full Moon**.
20. The moon appears bright in the sky due to the reflection of **sunlight** on the moon's surface.
21. The side of the moon facing the Earth is completely dark in the **New Moon** of the lunar month.

5 Write the scientific term

1. It is the fastest rotating planet in the solar system. (**Jupiter**)
2. It is an imaginary line passing through the Earth from the North Pole to the South Pole. (**Earth's axis**)
3. It is a phenomenon that occurs due to the Earth's rotation around its axis. (**Cycle of day and night**)
4. It is a group of stars that looks like a certain shape in the sky. (**Constellation**)
5. They are giant celestial bodies composed of gases. (**Stars**)
6. The moon has different shapes through a full lunar month. (**Moon phases**)
7. It is a phase of the moon in which the side of the moon facing Earth is completely dark. (**New Moon**)
8. It appears in the middle of the month, when the side of the moon facing Earth is fully illuminated. (**Full Moon**)

6 Give reasons for the following:

1. The sequence of night and day occurs.
   Due to the Earth's rotation around its axis.
2. We do not feel the movement of Earth and it seems like it is standing still.
   Because we are moving with the same speed of Earth.
3. The Sun appears to us much larger than other stars.
   Because it is the closest star to the Earth.

4. The lengths and angles of shadows vary throughout the day.

Because of the apparent movement of the Sun and the amount of Sunlight.

5. The moon looks bright in the sky.

Because the moon reflects the light of the Sun.

6. The occurrence of the phases of the moon occur.

Because of the moon's revolution around the Earth.

7. The moon appears in different shapes during the lunar month.

Because of the moon's revolution around the Earth.

7 What happens if:

– The Earth stopped rotating on its axis?

The cycle of day and night will not occur.

8 Answer the following questions:

1. Why don't we send astronauts to explore the stars?

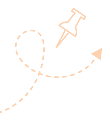
Because stars are too far away from Earth.

2. Mention a device used to observe celestial bodies.

Hubble Telescope – Galileo Binoculars

3. What is meant by the pole stars?

They are stars near North and South Poles; and their locations change a little bit during the year.



حمل الآن

مجانا وحصريا

المراجعة رقم (3)

الترم الثانى







Concept 3.1

Lesson 1

Scientists divided the Earth into four main systems (spheres)

1- Biosphere

It is the system that includes all living organisms such as humans, plants, animals, microorganisms

2- Hydrosphere

It is the system that includes all water on the Earth (fresh water and salt water).

3- Atmosphere

It is the system that surrounds the Earth and it is composed of mixture of some gases such as nitrogen, oxygen, carbon dioxide, water vapor

4- Geosphere

It is the system that includes rocks, soil, sand

NOTES systems can interact with each other such as: living organisms in the biosphere interact with the hydrosphere

Water affect nonliving things as it cause

Weathering

It is the process of breaking down of rocks into smaller particles.

After rocks are broken down erosion process happens →

Erosion

the transportation of small particles of rocks to another place by water or wind

Water can change from liquid to

- gas state → water vapor by evaporation
- solid state → ice by freezing

❖ There are many sources of water on Earth such as:

- Rivers, Lakes, Oceans, Seas, Groundwater.

Uses of water

(Preparing food - Bathing - Cleaning - Recreation- Travelling - Manufacturing)

The Amount of Water on Earth

-nearly three-quarters (71%) of the Earth

-so our planet looks like a blue marble

-total amount of water on Earth does not change

Importance of water

-Humans and animals drink water to survive.

-Plants need water to grow.

-Some animals and plants live in water



Lesson 2

Bodies of Water

1- Oceans and seas

saltwater

- They are very large water bodies.
- always contain salt water.

2- Lakes

fresh water-saltwater

- a water body that is surrounded by land.
- Most of lakes contain fresh water and some of them contain salt water.

3- Rivers

freshwater

- It is a body of water that flows from an area of high altitude to an area of lower altitude in a definite path.

4- Groundwater

fresh water

- It is the water that lies under the Earth's surface and has been absorbed into Earth through a layer of porous rocks.

NOTES Water is considered a renewable resource due to the occurrence of the water cycle.

stages of water cycle

Water on Earth evaporates → Water vapor is collected in the air → forming clouds → Water returns back → in the form of rains.

Lesson 3

1- Biosphere

"Bio" means "Life".
includes all living organisms:Humans , Animals,Plants.

2- Hydrosphere

"Hydro" means "Water".
includes all of the water on, under and above Earth:Oceans, Seas,Rivers, Groundwater,Glacier

3- Atmosphere

"Atmo" means "Vapor".
is called "air".
includes all the gases that surround Earth: Oxygen, Nitrogen Carbondioxide

4- Geosphere

"Geo" means"Earth"
It known as "Lithosphere".
includes: Rocks,Minerals,Soil, mountains,valleys Molten rocks inside Earth.

1-Hydrosphere interacts with geosphere --- like erosion of rocks by water and formation of lakes,
2-Atmosphere interacts with biosphere --- during photosynthesis plants take in carbon dioxide from the air and release oxygen needed for respiration
3-Geosphere interacts with biosphere --- plant roots absorb nutrients from soil during photosynthesis to produce their food

Biome It is a large area of the world that has similar soil, climate, plants and animals(wildlife).
Examples : Deserts. - Forests. - Rainforests. - Grasslands. - Wetlands.

❖ Water that found on Earth may be:

-Salt water Or Fresh water.

► **Salt water:**

It forms about (96.5%) of water on Earth.
It is found in oceans, seas, gulfs (bays) and some lakes.

► **Fresh water:**

It forms about (3.5%) of water on Earth.
It is found in rivers, rainwater, groundwater and most of lakes.

NOTES Most of fresh water on Earth is not found in liquid or running water, but it is found in the form of frozen water as large pieces of ice known as glaciers.

-**Groundwater** is the water that lies beneath (under) Earth's surface and has been leaked into Earth through a layer of porous rocks.

❖ hydrosphere and biosphere interactions 

- ❖ Humans drink water to survive
- ❖ Water is the habitat of fish
- ❖ Plant need water to survive
- ❖ Animal drink water to survive

Lesson 4

Aquatic ecosystems

❖ Water ecosystems are also called aquatic ecosystems.
❖ Aquatic ecosystems on Earth can be classified in different ways such as:

- Saltwater ecosystems
- Freshwater ecosystems

1-Saltwater Ecosystems

- Oceans and seas are the largest saltwater ecosystems that cover large parts of Earth's surface.
- Saltwater (marine)ecosystems of oceans and seas include(Shallow Areas and Deepest areas)

1- Shallow Areas

- These areas contain coral reefs and intertidal zones.
- intertidal zones: area along the coast that disappears under water at the high tide and appears at the low tide.

2- Deepest areas

- These areas are called abyssal zones.
- abyssal zones: They are very deep areas in oceans where sunlight cannot reach them.

Salt Lakes

- Lake Bardawil in Egypt
- Lake Assal in Djibouti :
  - It has high concentration of natural salts.
  - Fish can't live in it.
  - Few plants can grow there.
  - Many bacteria live in it.

2-Freshwater Ecosystems

(Ponds and most Lakes) :

- the water is present all year.
- Some other ponds and lakes dry up in the hot summer months.
- Example of fresh lake: Lake Nasser in Egypt

(Flowing Water bodies):

- They include rivers and streams (streams are small bodies of flowing water).
- Water is always moving in the flowing water bodies.
- Many different plants and animals live in flowing water bodies.

Ponds, streams and oceans

1- ponds

Type of water: They have fresh water.

Water movement: They have still water.

Species live in ponds:

- Some plants like water lilies.
- Some types of worms.
- Salamanders and frogs live in ponds.

2- Streams

Type of water: They have fresh water.

Water movement: They have running water, where water in streams is cool and flows fast.

species live in streams:

- Catfish
- Salmon (Trout)

3- Oceans and seas

Type of water: They have salt water.

Water movement: Water of oceans and seas is constantly moving in the form of waves that crash onto the shore.

Species live in oceans:

- Kelp
- Dolphin
- Starfish
- Moses fish (Flounder fish

NOTES

- Oceans and seas environments include many smaller ecosystems.
- Ocean water circulates around the world in patterns called ocean currents.

Lesson 1

Concept 3.2

Water-A Precious Resource

- There are many natural resources on Earth such as water, metals (like gold, silver and aluminum), plants
- people must protect and conserve the natural resources on Earth.

Why is water a valuable natural resource?

- All living organisms need water to survive.
  - How can we protect the natural resources on Earth's surface?
- There is a limited amount of water on Earth, where:
- Most of the water is salt water which cannot be processed by most plants and animals.
- So, we must conserve fresh water and prevent it from pollution, where polluted water can cause harmful effects on living organisms.

The importance of water

- Uses of water: drinking, bathing, cleaning vegetables and fruits, fishing and transportation, agricultures, and generating electricity.
- In Egypt, water is used to generate electricity at the Aswan High Dam.

Sources of Water

- Fresh Water : Rivers, lakes, ponds, streams, glaciers, groundwater, and rain.
- Salt Water : Oceans and seas.
- Most of lakes contain fresh water and some contain salt water.

Conserving fresh water

- It means using water in a correct way, because the percentage of fresh water that is suitable for drinking is very small compared to the percentage of water on Earth
- we must conserve the limited amount of fresh water through many ways such as:
  1. Turning off water tap (faucet) during brushing your teeth.
  2. Taking a quick shower.
  3. Turning off the water, while washing your hair.

Water Bodies

Water Body	Type of Water	Location
River	Fresh water	Starts in mountains and flows to a sea or larger river. Ends when it meet sea or large river
Lake	Most are fresh water	Low-lying areas, surrounded by land.
Wetland	Fresh water	land Partially covered with water (swamps, ponds).
Estuary	Salt mix with fresh	Where a river meets the sea or ocean. Home to thousands of plant and animals
Groundwater	Fresh water	In cracks and spaces of underground rocks
Ocean	Salt water	Surrounds continents Its floor contain mountains and plains

Lesson 2,3

Fresh water bodied and Watersheds

- About 10% of the world's animal species live only in freshwater habitats.
- Fresh water scarcity and poor quality are two main risks that threaten the world.
  - Poor quality of fresh water leads to:
- The death of thousands of living organisms every year.
- The extinction of some species live in fresh water such as some fish and amphibians.
- fresh water resources on Earth are limited, so without the right balance of using it leads to the occurrence of water imbalance causing droughts or floods that impact many organisms.
- Humans use some strategies to control and conserve fresh water for their needs such as: building dams across rivers to store water.

Watershed It's an area where water flows from different sources in one direction into a common location (like a bay or ocean, sea).

The study of freshwater systems focuses on water balance in watersheds

Condition	Effect
More rainfall	Water levels rise, causing floods
Less rainfall	Water levels drop, rivers may dry up, leading to drought
Water balance	constant source of fresh water.

NOTES

- A watershed can help scientists understand how the water bodies in an area interact with one another.

human activities that take place in some water bodies as tributaries

Tributaries They are small water bodies such as small creeks or streams that flow into bigger rivers.

❖ path of movement: small creeks or streams → bigger rivers→ bays, seas and oceans.
larger water bodies

Term	Definition
Upstream	The place where a river starts.
Downstream	The place where a river ends.

How Human Activities Affect Watersheds

Human Activity	Effect on Water Bodies
Factory Waste	Water carry waste to connected other water bodies. Causing water pollution
Building Dams	hold the water behind it and causes a change in the amount of water in other water bodies.
Farm using chemical fertilizers	Water Carries the farm to connected other water bodies. Causing water pollution.
Trash dump near a river	Water Carries the litter to connected other water bodies. Causing water pollution.

NOTES
❖ What happens upstream in a watershed affects the water bodies downstream.

Lesson 4

Conservation ,preservation and sustainability

Natural resources	Objects made from natural resources
Trees	Paper is made from trees.
Oil products	Most plastic is made from oil products.
Plant and animal products	Clothes are made from plant such as cotton and animal products such as wool of sheep's.

❖ Humans can conserve natural resources in different ways such as:
1- Preservation. 2- Sustainability.

1- Preservation it means restricting access (control reaching) of humans to these natural resources or using them. Or prevent using or developing natural resources in special areas.

Methods of Resource Preservation

❖ Countries prevent using or developing of natural resources in some protected areas of land such as:

1- Ras Mohammed Protectorate in South Sinai.
2- Wadi Al-Hitan Protectorate in Fayoum.

Result of Overuse natural resources

Resource	result
Fish	If overfishing is more than the fish that are replaced by their reproduction in oceans and seas they become rare and fishing will decrease.
Groundwater	If groundwater of wells are used faster than they are replaced by rains, it will run out and the wells will become dry

2- Sustainability

It means using natural resources in a way that does not negatively affect the future supply of these resources.

➢ Example of resources sustainability:

❖ Cows feeding on grass in a field where grass grows slowly

Unsustainable situation	Sustainable situation
If cows are placed in many small areas of grass, and eating all grass	If cows are placed in one large area of grass so, the cows still have more food.
This causes the disappearance of grass in these areas and t cows will be very hungry.	This causes the grass to grow back in other areas.

Resource sustainability is affected by many factors such as

❖ Overpopulation.
❖ Unequal distribution of resources.
❖ Overuse (overconsumption) or damage of resources.
❖ Pollution.

NOTES

❖ **Renewable Resources Are NOT Unlimited:**
Renewable resources can be used up if people don't use them wisely.
Examples:
1. Water Pollution: Makes fresh water undrinkable.
2. Deforestation: Cutting too many trees causes soil erosion.
3. Burning coal and oil leads to soil pollution causes death of plants and animals

Lesson 5

Recycling Water

Recycling Water

Removing harmful materials from wastewater for reuse.

Example :

Bahr Al-Baqar wastewater treatment plant in Egypt is one of the largest, recycling wastewater for reuse.

- The solar energy helps the Earth to recycle and reuse water.
- **Wastewater** is the water that has already been used in homes and different industries.

NOTES

Most people use filters in their homes to purify and cleaning water.
Filter compose of: cotton ,charcoal and sand

Role of Wastewater Engineers

1. Design tools to filter and recycle wastewater.
2. observe and check each the amount of pollutants in water.
3.They decide where to build water treatment plants , observe and check each step in water treatment process.
4. Protect communities from floods and ensure safe drinking water.
5. Testing drinking water for safety.

Lesson 1

Concept 4.1

Effects of Gravity

What is Gravity?

It is the force of attraction between objects that have mass.

Or the force that pulls objects toward the center of Earth.

- It affects all objects with mass, even if they are not touching.
  - **How does gravity affect the movement of objects?**
- pulls objects down toward the ground, such as skydivers that fall down
- force of gravity between the Sun and objects in the solar system keeps the planets revolve in fixed orbits.
- Gravity is pulling the moon and still revolves in its orbit around Earth.
- The gravity of the moon affects the ocean tides.

➢ **Examples show effect of gravity:**

❖ Girl on bike falling over: The force of gravity is pulling the girl

❖ Pouring oil

NOTES

What If There Were No Gravity?

❖ Objects would float away.

❖ The Moon would drift into space instead of orbiting Earth.

Lesson 2

Factors Affecting Gravity

1- **Mass:** increase mass = increase gravity

❖ Example: Earth has stronger gravity than the Moon because Earth is bigger.

❖ If the Moon's mass twice its real, gravity increase and come closer to earth may crash

2- **Distance:** increase distance = decrease gravity

❖ Example: If the Moon distance twice, Earth's gravity become smaller.

Forces It is a pull or a push that is applied to an object.

❖ Forces are needed to make things move.

❖ Some forces are weak, like the push force needed to move a toy car.

❖ Some other forces are strong, like the push force needed to move a real car.

Types of Forces

force	Cause	Effect
Wind turbine	Wind pushes on the blades of a wind turbine	Wind turbine blades move.
Falling of a cup	Gravity pulls a cup you drop to the floor	The cup falls to the ground
Magnet	• has a kind of invisible force that cannot be seen, known as magnetism • magnet can exert a pulling force or a pushing force	
Magnetism	Is force of attraction or repulsion (pushing away) between two magnets or between a magnet and an object.	
Pulling force of magnet	A magnet pulls paper clips up	Paper clips move toward the magnet
Pushing force of magnet	A magnet pushes away another magnet	The other magnet is pushed away

NOTES

Gravity can exert only a pulling force, while a magnet can exert a pulling or pushing force.

Lesson 3

Gravity and Motion

- **Objects fall down →** Throw a ball into the air, the ball will go up into the air its movement changes and then fall back down to the ground every time.
- Gravity does not only act on falling or moving objects but also, it acts on objects that do not move, such as a boy sits on a chair or a book on a shelf
- **Earth-and-moon system →** Earth is bigger than the moon and it has more mass so, Earth has stronger gravity than the moon.
- The gravity of the moon **causes** the attraction of Earth toward the moon.
- The moon stays in **a fixed orbit** around Earth due to the gravitational force of Earth.

NOTES

- the factors that cause the change of the angle measurements are:
  1- The tilt of the metersticks up and down.
  2- The movement of the string.
- All objects on or near Earth's surface are pulled down toward the center of Earth.
- As the tilt of the meterstick changed, the angle changed because the weight

---

Lesson 4

Gravity, Friction, and Air Resistance

Forces	Definition
Magnetism	A force that can pull (attract) or push (repel) objects like iron, nickel and cobalt
Friction	A force that opposes the motion of a body across a solid surface or through a gas or liquid. (ex: bicycle brakes).
Air Resistance	A type of friction that opposes the movement of an object as it passes through air. (ex: parachute).

Examples

- Some iron nails can be attracted to a magnet due to its pulling force on them.
- Friction slows a bicycle when brakes are applying and generated between two touching surfaces.
- Skydiver opens his parachute; it gets filled with air due to the upward flow of wind forming air resistance to the parachute
- Air resistance pulls the skydiver backward and slow fall

❖ A feather takes longer to fall than a paper clip due to its larger surface area, making it more affected by air resistance.

NOTES

1. Air resistance slows falling objects the greater the surface area, the stronger the air resistance.
2. Gravity acts constant on all objects, but air resistance causes differences in falling objects

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Lesson 5

The revolving planets

1. The Solar System consists of the Sun and 8 planets orbiting it.
2. In 1543, Nicolaus Copernicus stated that Earth revolves around the Sun.
3. In the solar system, each planet revolves around the Sun in a fixed path called an orbit.
4.The orbit of each planet has an ellipse (oval) shape.
5.Earth revolves around the Sun at a speed nearly equals 107000 km per hour.
6. If there were no gravity, the planets would fly off into space.

NOTES

Why the Sun is the Center of Motion:

❖ The Sun is much bigger than planets, so its gravity is strongest.
❖ Gravity is the invisible attraction or pulling force that holds all the planets in their places.
❖ The great gravitational pulling force of the Sun keeps the planets revolving in fixed orbits around it.

Lesson 1

Concept 4.2

Earth's Rotation and Day, Night Cycle

What causes the cycle of day and night ?

❖ Earth's rotation causes:
a. The cycle of day and night.
b. The Sun, Moon, and stars to appear to move across the sky
c. Shadows of objects to move throughout the day

Day and night

❖ Earth spins (rotates) all the time.



- ❖ We cannot feel Earth spinning, but we know that from the regular pattern of day and night.
- ❖ The phenomenon of regular pattern of day and night happens due to Earth's rotation on its axis.

Earth's Axis It is an imaginary line through the North and South Poles.

❖ Earth takes a whole day (24 hours) to make one complete turn on its axis

NOTES
- ❖ The side facing the Sun has day.
- ❖ The side facing away from the Sun has night

the Sun in the sky When facing north

Time of Day	Sun's Position
Morning	Rises in the right "east "(rising)
Noon	Above your head in center
Afternoon	Moves to the left "west" (setting)

NOTES
- ❖ The Sun, Moon, and stars appear to rise in the east and set in the west due to Earth's rotation. (This is called apparent motion)

Rotation (vs) Revolution

Rotation	Revolution
It is the spinning of an object around an axis	It is the orbiting of an object around another object.
Ex: Earth rotates on its axis	Ex: Earth revolves around the Sun in an orbit.
Causes day and night	Causes the seasons
Takes 24 hours	Takes about 365.25days(one year)

Lesson 2

Cycle of day and night

- ❖ Cycle means a series of events that is repeated in the same order for example:
  - cycle of day and night.
  - The cycle of seasons.

❖ Earth rotates counterclockwise (from west to east) on its vertical axis

➢ Why Don't We Feel Earth's Rotation and seems like Earth is standing still?

- Because we are moving with Earth at the same speed and attached to its surface

The Sun makes shadows

As the Sun appears to move in the sky, this causes the movement of shadows of objects

- Early, ancient Egyptians used shadows cast by giant stone to know the time of the day.
- Later, ancient Egyptians invented the first timepiece that used to know the time called sundial (shadow clock)

➢ Two Factors Affect Shadow Size:

1. Sun's position in the sky (higher = shorter shadow)
2. Amount of sunlight during different seasons

NOTES

- Changes in length and angle prove Earth's rotation
- Jupiter is the fastest planet that rotates on its axis
- Earth's high rotation speed -1600 km/h

Lesson 3

The Sun and the Stars

Stars Are giant spheres of superhot gases (highly explosive gases).

- They produce their own heat and light through gas reactions.

➢ The Sun :

- A medium-sized star.
- The only star in our solar system while other stars are farther away from the solar system.
- Appears bright because: It's largest object in the solar system and closest star to Earth.
- Provides earth with heat and light which are necessary for continuity of life on Earth.

study stars by using technology

➢ What Is a Galaxy? A group of stars, gases, planets held together by gravity.

- The Universe: is the wide space that contains celestial objects as stars, galaxies, comets, meteors and human-made satellites like the International Space Station
- As the universe is so big, many objects are too far away to be seen with the naked eye.
- Astronauts cannot be sent to study these very distant objects like stars.

Tool	Example	Use
Binoculars	Galileo Binoculars	See distance object in more details
Telescopes	Hubble Space Telescope	

NOTES

- Atmosphere acts as a protective layer around Earth, bec.it allows some light waves to pass to Earth, while it blocks some other light waves.

Lesson 4

Constellations and Starlight

Constellation A group of stars that forms a pattern or looks like a certain shape in the sky, connected by imaginary lines

Example: Constellation Orion (named by a mythical hunter).

- ❖ We see different constellations more in winter than summer.
- ❖ Some constellations are visible all year (near poles).
- ❖ The night sky changes slowly each night and repeats every year.

Change	Cause
Stars seem to move across the night sky.	Due to Earth's rotation on its axis.
Constellations appear at different locations in the sky during different times of the year.	Due to Earth's revolution around the Sun



NOTES

- ❖ Some constellations appear in specific seasons only.
- ❖ Some stars may disappear from view, but they are still in the sky, just not visible from our location.
- ❖ Every night, new stars appear from east

Starlight

- ❖ Stars make their own light where they are made of hot gases that make them bright
- ❖ Some stars are larger or smaller than the Sun.
- ❖ Planets and moons don't make their own light, so they are considered as dark bodies.
- ❖ The moon bright in the sky because it reflects light from the Sun
- ❖ Polar Stars: are closer to the north and south poles move slightly in the sky, so the place of these stars changes a little bit in the night sky throughout the year.

NOTES

- ❖ Constellations help: In determining directions (North, South, East, West).



Lesson 5,6

Phases of the Moon and Planetarium

Why Does the Moon Phases occur ?

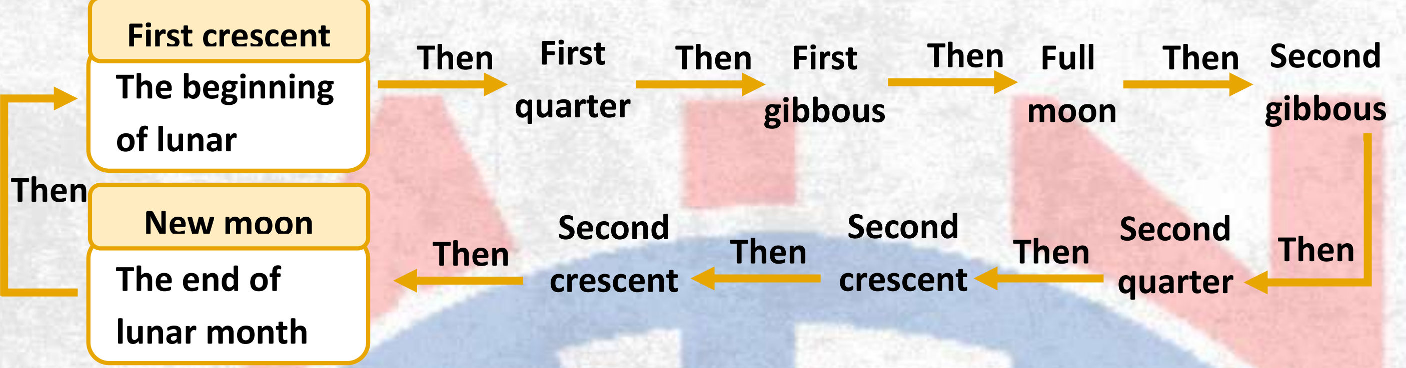
➢ Due to:

- ❖ Moon's revolution around Earth

- Earth's revolution around the Sun
- Both Earth and the moon revolve together around the Sun.

Moon phases: The Moon's appearance changes in a repeating pattern

- The moon phases are changed during the lunar month is also known as "Hijri month".
- The cycle of moon phases is repeated at the beginning of each lunar month as follows:





Phase	Description
Crescent	-The edge of the moon's face appears as an illuminated crescent (small shiny crescent). - This phase is the first phase of the moon phases. - In the first crescent moon phase, the size of the illuminated part increases gradually over time.
Full Moon	-The apparent face of the moon that faces Earth is fully illuminated. -This phase appears in the middle of the lunar month.
New Moon	-The apparent face of the moon that faces Earth is fully darkened. -This phase appears in the last day of the lunar month.











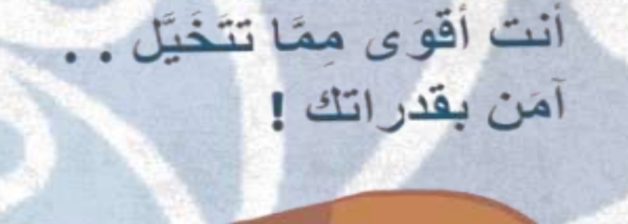


Planetarium

Point	Details
Definition	A place where we can see images of stars, planets, constellations and other celestial bodies
Tools	Uses a projector on a dome ceiling + computer programs to show sky views.
What It Shows	-Sky at different times of month/year. -How the sky looked long ago.
Manages	Planetarium directors mange it :study the properties and behavior of celestial bodies in the space, where:
Their Role	-Manage the building -Create space shows -Explain space concepts
Example	Planetarium in Alexandria

With my best wishes for you

Mrs/Menna Hussein





المراجعة رقم (4)

الترم الثانى





Final revision grade 5

Choose the correct answer:

1- All the following are components of the atmosphere, except
   a) oxygen gas   b) nitrogen gas   c) molten rocks   d) water vapor
2- Which of the following is a part of the geosphere?
   a) Water   b) Air   c) Rocks   d) plants
3- Which of the following is a part of the biosphere?
   a) Ice   b) clouds   c) Water   d) Animals
4- Mountains and valleys are parts of ……….
   a) geosphere   b) atmosphere   c) biosphere   d) hydrosphere.
5- Rocks are broken down into smaller particles during ……… process.
   a) photosynthesis   b) weathering   c) erosion   d) respiration
6- Irrigation of plants is an example of the interaction between two Earth's systems which are …………… and …………..
   a) hydrosphere – geosphere   b) atmosphere - biosphere
   c) geosphere – atmosphere   d) biosphere - hydrosphere.
7- Roots fix plants in the soil, this is an interaction between ………
   a) biosphere – geosphere   b) atmosphere – biosphere
   c) geosphere – atmosphere   d) biosphere – hydrosphere
8- Polar bears live on ice, this is an example of an interaction between ……….. and ……….
   a) atmosphere – hydrosphere   b) geosphere – hydrosphere
   c) biosphere – geosphere   d) biosphere – hydrosphere
9- Water evaporation and its condensing on planet Earth show an interaction between ……… and ………..
   a) atmosphere – hydrosphere   b) geosphere – hydrosphere
   c) biosphere – geosphere   d) biosphere – hydrosphere
10- Water is used in all the following purposes, except ….
   a) recreation   b) burning   c) bathing   d) manufacturing

11- Water covers nearly ………….. of the Earth planet.

a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{3}{4}$ d) $\frac{3}{5}$

12- 96.5 % of Earth's water is ……………..

a) salt water b) sugar water c) fresh water d) frozen water

13- All the following are characteristics of abyssal zone, except

a) they are very deep areas b) sunlight cannot reach it

c) they are dark areas d) they are shallow areas

14- Rivers and streams contain ……… water, while ponds contain ………. water.

a) salt – fresh b) fresh – salt c) running – stil d) still – running

15- Water lilies can live in ……..

a) ponds b) seas c) oceans d) deserts

16- Among animals that can be found in ponds are …….. and …..…..

a) lions – salamanders b) dogs – frogs

c) frogs – salamanders d) foxes – bears

17- Water can control the …………… of living organisms bodies.

a) length b) height c) temperature d) volume

18- All the following are from sources of water on the Earth, except ...……

a) aquifers b) ponds c) glaciers d) molten rocks.

19- Among the sources of water which human can use for drinking

a) seas b) oceans c) saltwater lakes d) rivers.

20- At the end of Nile River Delta, there is an ……….. between Nile River and Mediterranean sea.

a) lake b) wetland c) ocean d) estuary

21- Among the kinds of wetlands are ………

a) swamps and lakes b) marshes and bogs

c) ponds and oceans d) swamps and estuaries.

22- Among the risks that threaten lots of water areas on Earth are

a) conservation and scarcity b) scarcity and poor quality

c) conservation and poor quality d) conservation and extinction

23- The level of water in a river may increase causing flooding, when there is more ………………

a) rainfall b) wind c) sunlight d) sediments.

24- ……… can be used to recycle wastewater to be used again.

a) Bottles b) Filters c) Dams d) Generator

25- All the following materials can be used to filter wastewater in simple water filter, except …….

a) cotton b) wood c) charcoal d) sand

26- …………… process is used to get filtered water from polluted water.

a) Recycling b) Sustainability c) Preservation d) Conservation

27- Tributary usually ends by the flowing of its water into …………

a) bigger ocean. b) sea. c) river. d) lake

28- All the following reasons cause water pollution in a river, except ....

a) litter of a nearby trash dump.
b) waste of a nearby factory.
c)chemical fertilizers of a nearby farm.
d) building a dam across the river

29- Prevent developing of Ras Mohammed Protectorate is considered as an example of ....

a) preservation. b) pollution. c) sustainability. d) consumption.

30- Cutting down too many trees of forests leads to ....

a) deforestation and soil deposition.
b) overpopulation and soil erosion.
c) deforestation and soil erosion.
d) overpopulation and soil deposition.

31- In contact force, the two objects need to ……… each other.

a) attract b) repel c) touch d) break

32- A table stands on the ground needs ……….. to move.

a) sunlight b) mass c) force d) air

33- Wind turbine blades move by the effect of ………

a) electricity b) gravity c) magnetism d) wind

34- Magnetism is a force that attracts objects made of the following materials, except……………………….

a) iron b) nickel c) wood d) cobalt

35- ………… is considered as a type of friction force.

a) air resistance b) gravity c) magnetism d) electricity

36- A boy on a slide moves down toward the ground due to the effect of ……

a) friction force b) gravity c) magnetism d) wind

37- Gravitational force of Earth is affected by ………

a) mass only b) mass and time.

c) distance only d) mass and distance

38- Which the following objects has the least attraction force?

a) The moon b) The Earth c) The Sun d) The magnet

39- All the following are properties of Earth's gravity, except…………

a) it pushes objects upward b) it affects the moon

c) it pulls objects downward d) it is a type of attraction force.

40- All the following are properties of magnetism, except…………..

a) it is an invisible force.
b) it happens only between two touched objects.
c) it may be pushing or pulling force.
d) it may push another magnet away.

41- When a basketball falls down from a height, it is affected by…………

a) air resistance b) gravity

c) air resistance and friction force d) a and b

42- The Earth rotates around itself once every ……………..

a) 24 hours b) 365 days c) 365 hours d) 24 days

43- The Earth's axis is …………….

a) real vertical b) imaginary horizontal

c) real horizontal d) imaginary vertical

44- The Earth rotates ……………… on its axis.

a) clock wise b) from north to south

c) counterclockwise d) from south to north

45- The Sun appears in the …… during the early morning.

a) east b) west c) north d) south

46- Rotation of Earth on its axis causes all the following phenomena, except ....

a) movement of the Sun from east to west.

b) movement of stars in the sky at night.

c) some stars seem to rise and set like the Sun.

d) occurrence of four seasons.

47-. In the middle of the day (at noon) we can see the Sun in …..... of the sky.

a) the left side　　b) the right side

c) above in the center　　d) the west direction

48-. The shortest shadow of an object happens ....

a) in morning　　b) in afternoon　　c) at noon　　d) at night

49-. The Sun forms longer shadow of object ....

a) in morning　　b) in afternoon　　c) at noon　　d) a and b

50-. The position of the Sun in the sky affects ……………..and …………… of shadows of objects.

a) lengths and speed　　b) angles and time

c) lengths and angles　　d) speed and time

51-. We can't send astronauts to study stars because they are ………….

a) so cold　　b) faraway　　c) too small　　d) too large

52-. Constellations appear ………….. in the sky during the year.

a) at different positions　　b) at the same position

c) in winter only　　d) in summer only

53-. All the following appear like small light dots in the sky at night, except……………….

a) a satellite　　b) the moon　　c) a star　　d) a meteor

54-. When the Earth is between the moon and the Sun, the moon appears in the .... phase.

a) half moon　　b) full moon　　c) new moon　　d) crescent

55-……………….. is the moon phase at which the edge of the moon's face appears as an illuminated.

a) Crescent　　b) Quarter　　c) Gibbous　　d) New moon

Complete the following sentences:

1- The system that includes all living organisms such as animals and plants is called …………

2- The groundwater found in soil and rocks is an example of interaction between ……..………and …………….

3- Formation of lakes is an example of an interaction between ……….….. and …………….

4- Water is responsible for ……..………process and ……………… process of rocks.

5- Weathering of rocks as a result of the effect of rains is an example of an interaction between ……………….and geosphere.

6- By heating of water it changes from ………..…state to ………..…state.

7- During the water cycle in nature, water evaporates forming ……..……, then it returns back to the Earth's surface during ……….……...

8- Fresh water forms some water bodies such as ………… and some lakes, while ……….…… and …………… are formed of salt water.

9- ………… water forms about 3.5 % of water on Earth, while ………… water forms about 96.5 % of water.

10- Catfish live in ………..… water, while dolphins live in ………… water.

11- Most lakes have ………… water, while some other lakes have ………… water.

12- Aquatic ecosystems can be classified into ……………… ecosystem and ………………… ecosystem.

13- Some types of worms live at the bottom of ………..………….

14- According to water movement, ponds have …………… water compared to streams that have ………… water.

15- ……………………..… makes about two-thirds of human body.

16- In High Dam, water is used to generate ………………………….

17- We must take a quick shower to conserve ……………………….

18- The floor of ………..……… may contain mountains and plateaus.

19- Groundwater is replaced by……………………………….

20- The extinction of some species that live in fresh water is due to the poor ……………………. of fresh water.

21- When the rate of rainfall decreases, the level of water in rivers will ………………… causing ………………….

22- A farm that is found near a tributary may cause water pollution if this farm is using chemical ………………..

23- Clothes can be made from................ products or .... products.

24- Water filters are used to remove ……… materials from polluted water.

25- Wastewater engineers can test the quality of .... by checking for the amount of ……………….in water.

26- The object at rest needs ………………… to move.

27- Object changes its position, this object is in a state of ………………..

28- The force that is needed to move a small bike is ………………than that needed to move a truck.

29- The force of magnetism may …………….. objects towards the magnet or ………………… objects away from it.

30- The direction of ………………… force opposes the direction of a body moves through air.

31- Gravity pulls objects toward the ………………… of Earth.

32- Anybody that has a mass must have ………………….

33- When the distance between the moon and the Earth increases, the gravitational attraction between them ………………….

34- If the mass of the moon increases than its real mass, its gravitational attraction will ………………….

35- The gravity of Earth is ……………… than that of the moon because the Earth has ………………… mass.

36- A parachute in air is affected by ……………… that acts against the ………… of Earth.

37- The Earth revolves around the Sun in a fixed ………………… that has an ……………… shape.

38- Day and night phenomenon occurs due to the rotation of Earth around its …………..……….

39- When half of Earth faces the Sun so, it has …………, and the other half has ………….

40- The Sun appears as it moves from …………… to ……….…….

41- The solar system consists of …….……… star and eight …………….

42- Formation of ……………… of objects is due to movement of sun across the sky.

43- Every night, we can see new stars appear from ……………..direction.

44- The Sun and other stars are made up of ………………… gases.

45- A constellation consists of a group of ………..……that form a pattern.

46- Ancient Greeks gave constellation …………….…… its name relative to a mythical …………….….

47- Planets and ………………..… can't make their own light.

48- Location of …………………… in the sky during the year helps us to determine the main ……………… of Earth.

49- The moon orbits ……………… and both of them orbit the …………….

50- The Sun is a star that gives out a very big amount of ……… and ……….

51- Through the month, we can see different ………………… of the moon in the sky.

52- …………………… is the moon phase at which moon seems completely bright, while ………………… is the moon phase at which moon seems completely dark.

53- Planetarium .... are scientists responsible for making amazing realistic show to bring the outer space to Earth.

Write the scientific term:

1- The system (sphere) that includes fresh water and salt water. (………..……)

2- The system of Earth which contains all different landforms. (……………)

3- The large sheet of ice or snow that moves slowly over Earth's surface. (………………)

4- The Earth's system which consists of a mixture of gases surrounding Earth. (………………)

5- A cycle shows the continuous movement of water from the Earth to the atmosphere then to the Earth again. (………………)

6- The energy which plays an important role in water cycle in nature. (………………)

7- The process in which the small particles of rocks are transported from a place to another. (………………)

8- A large area of the world that has similar soil, climate, plants and animals. (………………)

9- The area along the coast that disappears at the high tide and appears at the low tide. (………………)

10- The largest saltwater ecosystems that cover large parts of Earth's surface. (………………)

11- The basic liquid matter which is needed by humans, animals and plants to survive. (………………)

12- A type of water which is suitable for drinking. (………………)

13- It is an area of land where all the water flows to a common location usually an ocean, a sea or other large water body. (………………)

14- They are small water bodies such as small creeks or streams that flow into bigger rivers. (………………)

15- A building established across a river which can hold water behind it. (………………)

16- Scientists who work on recycling water in water treatment plants. (………………)

17- The effect that pull or push an object to make it move. (……………….)

18- The force by which metals are attracted or pulled to a magnet. (……………….)

19- A type of friction force that opposes the movement of an object as it passes through air. (……………….)

20- A force that pulls object down toward the ground. (……………….)

21- A celestial body that orbits the Earth. (……………….)

22- Celestial bodies that revolve around the Sun in fixed paths.(……………)

23- A phenomenon takes place in oceans and seas due to gravity of moon. (……………….)

24- The law which states that the force of gravity is constant and acts on all objects in the same way. (……………….)

25- It is an imaginary line that passes through the Earth's two poles. (……………….)

26- The spinning of Earth on its axis. (……………….)

27- The orbiting of Earth around the Sun. (……………….)

28- The phenomenon that occurs when half of the Earth is facing the Sun. (……………….)

29- The phenomenon that occurs when half of the Earth doesn't receive sunlight. (……………….)

30- The center of the solar system. (……………….)

31- The first time piece that is used by ancient Egyptians to know the time. (……………….)

32- The group of stars that make a certain shape in the sky. (……………….)

33- They are giant spheres of superhot gases. (……………….)

34- A special building with dome ceiling, and is used to see images of celestial bodies. (……………….)

Put (√) or (x):

1) Earth's systems don't interact with each other. ( )
2) When wind carries seeds of some plants to new places, an interaction between atmosphere and biosphere can be observed. ( )
3) Rainwater is the only reason for weathering and erosion of rocks on the Earth's surface. ( )
4) Water is important for growing of living organisms. ( )
5) Deserts and forests are examples of biomes. ( )
6) Water evaporates from the surface of a lake will move from atmosphere to hydrosphere. ( )
7) If there is no hydrosphere, the biosphere will not exist. ( )
8) Water on the Earth is divided into fresh water and salt water. ( )
9) The amount of fresh water on Earth is more than that of salt water. ( )
10) Most of the salt water on Earth is found in the form of frozen water. ( )
11) The total amount of water on Earth doesn't change. ( )
12) All animals and plants can live in aquatic habitats. ( )
13) Some ponds and lakes may dry up in winter months. ( )
14) Without water, all forms of life will disappear. ( )
15) There are no living organisms live in the hydrosphere. ( )
16) When the amount of water decreases or water get polluted, biosphere will be affected. ( )
17) A river always flows from an area of low place to an area with higher place. ( )
18) Wells and springs obtain their water from aquifers. ( )
19) The amount of salt water on the Earth is smaller than the amount of fresh water. ( )
20) Some animals and plants live in water. ( )
21) The place where two oceans meet is called an estuary. ( )
22) Rivers and streams are freshwater moving bodies. ( )
23) Turning off the water tap, while washing your hair is from the ways to conserve water. ( )

24) We can drink the water of seas. ( )

25) Rivers often start in mountains in the form of estuaries. ( )

26) Assal lake is surrounded by land and it is a low-lying area. ( )

27) The type of water in lakes is salt water only. ( )

28) Upstream is the place where a river starts. ( )

29) Preservation and sustainability are ways to conserve natural resources. ( )

30) Placing many cows in small grass areas is considered as unsustainable situation. ( )

31) Recycling of wastewater means removing waste materials from it. ( )

32) Water is considered as a nonrenewable natural resource. ( )

33) Adding some of mud to clear water can pollute it. ( )

34) Wastewater engineers decide where to build water treatment plants. ( )

35) Force is the reason of motion of any body. ( )

36) Magnet must touch objects to attract them. ( )

37) The force of magnet is always attraction force only. ( )

38) Force of gravity can be seen easily, but we cannot see its effects. ( )

39) Objects are pushed away of each other due to gravity. ( )

40) Gravity affects the movement of objects. ( )

41) If two objects don't touch each other, there is no gravity between them. ( )

42) Small planets have bigger gravity than big planets. ( )

43) All planets of the solar system rotate around the Sun in one orbit only. ( )

44) Skydiving sport depends on gravity and air resistance. ( )

45) Gravity is similar to magnetism because both of them have only pulling force. ( )

46) Gravity affects only on the moving objects but doesn't affect the objects at rest. ( )

47) Gravity is the force that holds all objects in their places. ( )

48) The direction and mass of an object are changed due to gravity. ( )

49) If there is no air resistance on Earth, all objects will reach the Earth's surface at the same moment when dropping them from the same height. ( )

50) Heavier objects reach Earth's surface before smaller objects due to the effect of air resistance. ( )

51) There is no air in space, so air resistance slows down the movement of objects through space. ( )

52) The orbit of each planet has an ellipse shape. ( )

53) The Earth revolves around the Sun once every 24 hours. ( )

54) All parts of Earth receive sunlight at the same time. ( )

55) If you change your direction on Earth's surface, the Sun will rise from west. ( )

56) The Sun rises in the east and sets in the west. ( )

57) Most of stars don't appear moving in the sky. ( )

58) Earth revolves around the Sun in a fixed path. ( )

59) We can feel the movement of Earth easily. ( )

60) All objects on Earth's surface move with the same speed of Earth. ( )

61) The Sun appears in the same place in the sky all the day. ( )

62) Planets of the solar system rotate on their axes with different speeds. ( )

63) The position of the shadow of Cairo Tower will not change during the day. ( )

64) The Sun is the biggest star in the universe. ( )

65) All celestial bodies make their own light. ( )

66) The Sun is a medium sized star. ( )

67) The Sun seems smaller, because it is much farther from Earth than other stars. ( )

68) Superhot gases of the Sun burn producing heat and light energy. ( )

69) Constellations have similar shapes in the sky. ( )

70) The moon seems shiny because it absorbs sunlight. ( )

71) The moon has only one phase during the lunar month. ( )

72) At crescent phase, a part of the moon edge appears bright. ( )

73) The Sun is bigger than the moon. ( )
74) The atmosphere let all light waves to pass to the Earth. ( )
75) Planetarium has a projector to display pictures on its ceiling. ( )

Correct the underlined words:

1- The system that includes rocks and heavy metals is called <u>hydrosphere</u>. (………………)
2- Rainwater is a part of <u>biosphere</u>. (………………)
3- Presence of dolphins in oceans represents an interaction between hydrosphere and <u>geosphere</u>. (………………)
4- A spring flows out from a rock is an example of an interaction between hydrosphere and <u>atmosphere</u>. (………………)
5- Water can change into water vapor in extreme <u>cold</u> weather. (………………)
6- A rat that digs a barrow in the soil is an example of the interaction between biosphere and <u>atmosphere</u>. (………………)
7- <u>Shallow</u> areas of oceans don't receive sunlight. (………………)
8- <u>Abyssal</u> areas of oceans contain coral reefs and intertidal zones. (………………)
9- Some animals live in <u>bonds</u> such as catfish, and trout. (………………)
10- <u>High</u> quality of fresh water leads to the death of marine organisms live in it. (………………)
11- Planets in the solar system revolve in fixed orbits due to the <u>friction</u> between the Sun and planets. (………………)
12- The gravitational force of Earth to a person in a flying airplane is <u>greater</u> than it when the same person stands on the ground.(……………)
13- The change of an object position is called <u>force</u>. (………………)
14- Magnetism is a kind of <u>visible</u> force. (………………)
15- Air resistance is a type of <u>pulling</u> force. (………………)
16- <u>Gravity</u> is attraction or repulsion force between two magnets or between the magnet and an object. (………………)

17- <u>Magnetism</u> is the force of attraction that changes the direction of a moving object in air towards the ground. (………………)

18- All objects on Earth's surface is affected by <u>repulsion</u> force of gravity. (………………)

19- Any object has gravity depending on its <u>length</u>. (………………)

20- Air resistance <u>speeds up</u> the object as it falls. (………………)

21- The <u>Earth</u>'s gravity keeps all planets in their orbits. (………………)

22- Gravity is the attraction or pulling force that keeps all <u>stars</u> in their orbits around the Sun. (………………)

23- The Earth orbits the Sun in <u>a rectangular</u> path. (………………)

24- The time taken by Earth to complete one rotation on its axis is called <u>year</u>. (………………)

25- The Earth's axis is <u>a real</u> line passes through Earth's poles. (………………)

26- Earth rotates on its axis at <u>low</u> speed. (………………)

27- At the beginning of the day, the Sun appears in the <u>west</u> direction. (………………)

28- <u>In the early morning</u>, the Sun would be above you in the center of the sky. (………………)

29- <u>Planets</u> are celestial bodies that make their own light. (………………)

30- Constellations have <u>similar</u> shapes in the sky. (………………)

31- Stars are made up of hot <u>liquids</u>. (………………)

32- The moon takes one lunar <u>year</u> to complete one cycle around the Earth. (………………)

33- At the <u>gibbous</u> phase, one edge only appears bright. (………………)

Give reasons for:

1- Water can affect nonliving things like rocks.

➢ ……………………………………………………………………….

2- Hiding of worms inside the soil is an example of an interaction between two Earth's spheres.

➢ ……………………………………………………………………….

3- Importance of atmosphere for plants in making their food.

➢ ……………………………………………………………………….

4- Water is important for all plants on Earth.

➢ ……………………………………………………………………….

5- Our planet looks like a blue marble from the space.

➢ ……………………………………………………………………….

6- More than 50% of known living organisms live in the aquatic environments.

➢ ……………………………………………………………………….

7- Most of the fresh water on Earth can't be used for drinking.

➢ ……………………………………………………………………….

8- Not every water source is used as drinking water.

➢ ……………………………………………………………………….

9- Water that forms the hydrosphere is one of the renewable resources on Earth.

➢ ……………………………………………………………………….

10- No green plants can survive in the abyssal zones of oceans.

➢ ……………………………………………………………………….

11- We must conserve fresh water.

➢ ……………………………………………………………………….

12- You should turn off water tap during brushing your teeth.

➢ ……………………………………………………………………….

13- Groundwater is called by this name.

➢ ……………………………………………………………………….

14- Farms near tributaries may cause water pollution.

➢ ………………………………………………………………………..

15- Countries prevent using or developing natural resources in some protected areas of land.

➢ ………………………………………………………………………..

16- Paper clips (or iron nails) are pulled toward the magnet.

➢ ………………………………………………………………………..

17- When using the bicycle brake, the bicycle stops.

➢ ………………………………………………………………………..

18- The ball changes its direction after we throw it upwards.

➢ ………………………………………………………………………..

19- The moon is attracted to Earth.
(The moon stays in fixed orbit around Earth)

➢ ………………………………………………………………………..

20- Gravity of Earth is greater than gravity of the moon.

➢ ………………………………………………………………………..

21- The astronauts float in space.

➢ ………………………………………………………………………..

22- The force of gravity has an important role in the solar system.

➢ ………………………………………………………………………..

23- Planets revolve around the Sun in fixed orbits.

➢ ………………………………………………………………………..

24- Air resistance affects the movement of an object which falls from a height.

➢ ………………………………………………………………………..

25- Skydiver opens his parachute during landing.

➢ ………………………………………………………………………..

26- A pencil takes a longer time to reach Earth's surface than a large rock if they are thrown from the same height.

➢ ………………………………………………………………………..

27- Occurrence of day and night.

➢ ………………………………………………………………………..

28- Half of Earth appears dark at night.

➢ ……………………………………………………………………..
29- Occurrence of the four seasons.
➢ ……………………………………………………………………..
30- The Sun appears as it moves in the sky.
(In the night sky, some stars seem to rise and set like the Sun.)
➢ ……………………………………………………………………..
31- Although Earth rotates on its axis, we don't feel its movement.
➢ ……………………………………………………………………..
32- The length of the shadow of an object changes throughout the day.
➢ ……………………………………………………………………..
33- The sun is a star.
➢ ……………………………………………………………………..
34- The Sun looks much larger to us than other stars.
➢ ……………………………………………………………………..
35- The moon appears bright in the sky at night.
➢ ……………………………………………………………………..
36- Earth and the moon are not considered stars.
➢ ……………………………………………………………………..
37- The moon has different phases in the night sky.
➢ ……………………………………………………………………..
38- Atmosphere limits the using of some telescopes to see distant celestial bodies.
➢ ……………………………………………………………………..

What happens if:

1- People don't conserve fresh water.
➢ ……………………………………………………………………..
2- Fresh water of a river when it meets the salt water of a sea.
➢ ……………………………………………………………………..
3- Water is collected in a low-lying area.
➢ ……………………………………………………………………..

4- The quality of fresh water becomes poor.

➢ ……………………………………………………………………..

5- The rate of rainfall increases on a river.

➢ ……………………………………………………………………..

6- A trash dump is established near a tributary that is connected with a river.

➢ ……………………………………………………………………..

7- You mix clear water with small amount of mud.

➢ ……………………………………………………………………..

8- Skydiver opens his parachute during landing.

➢ ……………………………………………………………………..

9- The mass of the moon decreases to half.

➢ ……………………………………………………………………..

10- There is no gravity on Earth.

➢ ……………………………………………………………………..

11- The gravity of Earth is a repulsion force not an attraction force.

➢ ……………………………………………………………………..

12- If the gravity between Earth and the moon disappears.

➢ ……………………………………………………………………..

13- The gravity of the Sun disappears.

➢ ……………………………………………………………………..

14- A metal ball and a feather are fallen down from a tower.

➢ ……………………………………………………………………..

15- You throw two iron balls have the same mass from the same height.

➢ ……………………………………………………………………..

16- There is no resistance and two objects with different masses are thrown from the same height.

➢ ……………………………………………………………………..

17- Earth doesn't rotate on its axis.
(Earth stops spinning on its axis.)

➢ ……………………………………………………………………..

18- Half of Earth faces the sun.

➢ ………………………………………………………………………..

19- Earth doesn't revolve around the sun.

➢ ………………………………………………………………………..

20- The shadow of an object if the Sun locates at east or west in the sky.

➢ ………………………………………………………………………..

21- Stars are not made up of hot gases.

➢ ………………………………………………………………………..

22- The Earth is located between the moon and the Sun.

➢ ………………………………………………………………………..

Choose from column (B) what suits it in column (A)

1)

Column A	Column B
1) The word "Geo" refers to	a) water
2) The word "Hydro" refers to	b) Earth
3) The word "Atmos" refers to	c) life
4) The word "bio" refers to	d) vapor

1	2	3	4
…….	…….	…….	…….

2)

Column A	Column B
1) Oceans	a) contain fresh water or salt water
2) Lakes	b) contain salt water only.
3) Rivers	c) contain mixture of fresh water and salt water.
4) Estuary	d) contain fresh water only.
5) Groundwater	e) is the water found between pores of rocks below Earth's surface.

1	2	3	4	5
…….	…….	…….	…….	…….

3)

Column A	Column B
1) A water body that often starts in the mountain as a stream.	a) Estuary
2) It is formed when a river meets a sea.	b) River
3) The large water body that is surrounded by land and formed when water collects in low-lying areas.	c) Wetland
4) The water bodies that surround the continents	d) Lake
5) It is a land area which is partially covered with water.	e) Oceans

1	2	3	4	5
…….	…….	…….	…….	…….

4)

Column A	Column B
1) Trees	a) Can be used in making plastic.
2) Sustainability	b) Can be used in making paper.
3) Oil products	c) Can be used in making clothes.
4) Cotton	d) The action of control reaching of humans to the natural resources or using them.
5) Preservation	e) Using resources in a way that doesn't negatively affect the future supply of these resources.

1	2	3	4	5
…….	…….	…….	…….	…….

5)

Column A	Column B
1) The force that arises between two objects when they touch each other.	a) Gravity
2) The force acts on all objects on Earth.	b) Contact force
3) The force between two objects that don't touch each other.	c) Friction force
4) The force opposes and slows down the movement of an object.	d) Non contact force

1	2	3	4
…….	…….	…….	…….

6)

Column A	Column B
1) Jupiter	a) is the path in which planets revolve around the Sun
2) Earth	b) is the fastest planet that rotates on its axis.
3) Orbit	c) Consists of sun and planets.
4) Solar system	d) is the planet that completes one cycle on its axis in 24 hours.
5) Cycle	e) The series of events that is repeated in the same order.

1	2	3	4	5
…….	…….	…….	…….	…….

7)

Column A	Column B
1) Scientists who study the properties and behavior of celestial bodies in the space.	a) Galaxy
2) Tools help scientists to see distant objects in space with more details.	b) Atmosphere
3) A group of stars, planets and gases held together by gravity.	c) Planetarium directors
4) The wide space that contains celestial bodies as stars, galaxies, comets and meteors.	d) Galileo binoculars and Hubble space telescope
5) A protective layer around Earth that allows some light waves to pass and block the others.	e) The Universe

1	2	3	4	5
…….	…….	…….	…….	…….

Cross out the odd words:

1- Water – carbon dioxide – oxygen – nitrogen.
2- Oceans – Rivers – Rocks– Lakes.
3- Ponds – rivers – rains – oceans.
4- Gulfs – seas – oceans – rivers.
5- Kelp – starfish – Moses fish – Frogs.
6- Gravity – Sun – Friction force – Magnetism.
7- Earth – Jupiter – The Sun – The moon.
8- Crescent – Full moon – Shadow – Gibbous.

Final revision grade 5 (Guide answers)

Choose the correct answer:

1- All the following are components of the atmosphere, except…………..
  a) oxygen gas b) nitrogen gas c) molten rocks d) water vapor
2- Which of the following is a part of the geosphere?
  a) Water b) Air c) Rocks d) plants
3- Which of the following is a part of the biosphere?
  a) Ice b) clouds c) Water d) Animals
4- Mountains and valleys are parts of ……….
  a) geosphere b) atmosphere c) biosphere d) hydrosphere.
5- Rocks are broken down into smaller particles during ……… process.
  a) photosynthesis b) weathering c) erosion d) respiration
6- Irrigation of plants is an example of the interaction between two Earth's systems which are …………… and ………….
  a) hydrosphere – geosphere b) atmosphere - biosphere
  c) geosphere – atmosphere d) biosphere - hydrosphere.
7- Roots fix plants in the soil, this is an interaction between …………
  a) biosphere – geosphere b) atmosphere – biosphere
  c) geosphere – atmosphere d) biosphere – hydrosphere
8- Polar bears live on ice, this is an example of an interaction between ………………... and ……………….
  a) atmosphere – hydrosphere b) geosphere – hydrosphere
  c) biosphere – geosphere d) biosphere – hydrosphere
9- Water evaporation and its condensing on planet Earth show an interaction between ……………… and ………………..
  a) atmosphere – hydrosphere b) geosphere – hydrosphere
  c) biosphere – geosphere d) biosphere – hydrosphere
10- Water is used in all the following purposes, except …………….
  a) recreation b) burning c) bathing d) manufacturing

11- Water covers nearly ……………… of the Earth planet.

a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{3}{4}$ d) $\frac{3}{5}$

12- 96.5 % of Earth's water is ………………..

a) salt water b) sugar water c) fresh water d) frozen water

13- All the following are characteristics of abyssal zone, except…………..

a) they are very deep areas b) sunlight cannot reach it
c) they are dark areas d) they are shallow areas

14- Rivers and streams contain ……………. water, while ponds contain ………………. water.

a) salt – fresh b) fresh – salt c) running – stil d) still – running

15- Water lilies can live in …………………..

a) ponds b) seas c) oceans d) deserts

16- Among animals that can be found in ponds are ………. and ………..

a) lions – salamanders b) dogs – frogs
c) frogs – salamanders d) foxes – bears

17- Water can control the ……….……… of living organisms bodies.

a) length b) height c) temperature d) volume

18- All the following are from sources of water on the Earth, except …….

a) aquifers b) ponds c) glaciers d) molten rocks.

19- Among the sources of water which human can use for drinking………..

a) seas b) oceans c) saltwater lakes d) rivers.

20- At the end of Nile River Delta, there is an ……….. between Nile River and Mediterranean sea.

a) lake b) wetland c) ocean d) estuary

21- Among the kinds of wetlands are ………

a) swamps and lakes b) marshes and bogs
c) ponds and oceans d) swamps and estuaries.

22- Among the risks that threaten lots of water areas on Earth are………..

a) conservation and scarcity b) scarcity and poor quality
c) conservation and poor quality d) conservation and extinction

23- The level of water in a river may increase causing flooding, when there is more ………………….

a) rainfall b) wind c) sunlight d) sediments.

24- ……………..… can be used to recycle wastewater to be used again.

a) Bottles b) Filters c) Dams d) Generator

25- All the following materials can be used to filter wastewater in simple water filter, except ……………….

a) cotton b) wood c) charcoal d) sand

26- …………… process is used to get filtered water from polluted water.

a) Recycling b) Sustainability c) Preservation d) Conservation

27- Tributary usually ends by the flowing of its water into …………

a) bigger ocean. b) sea. c) river. d) lake

28- All the following reasons cause water pollution in a river, except ....

a) litter of a nearby trash dump.

b) waste of a nearby factory.

c)chemical fertilizers of a nearby farm.

d) building a dam across the river.

29- Prevent developing of Ras Mohammed Protectorate is considered as an example of ....

a) preservation. b) pollution. c) sustainability. d) consumption.

30- Cutting down too many trees of forests leads to ....

a) deforestation and soil deposition.

b) overpopulation and soil erosion.

c) deforestation and soil erosion.

d) overpopulation and soil deposition.

31- In contact force, the two objects need to ……….…… each other.

a) attract b) repel c) touch d) break

32- A table stands on the ground needs …………..…….. to move.

a) sunlight b) mass c) force d) air

33- Wind turbine blades move by the effect of ……………….

a) electricity b) gravity c) magnetism d) wind

34- Magnetism is a force that attracts objects made of the following materials, except………………………..

a) iron b) nickel c) wood d) cobalt

35- …………….……… is considered as a type of friction force.

a) air resistance b) gravity c) magnetism d) electricity

36- A boy on a slide moves down toward the ground due to the effect of ……

a) friction force b) gravity c) magnetism d) wind

37- Gravitational force of Earth is affected by ……….………

a) mass only
b) mass and time.
c) distance only
d) mass and distance

38- Which the following objects has the least attraction force?

a) The moon b) The Earth c) The Sun d) The magnet

39- All the following are properties of Earth's gravity, except……………..

a) it pushes objects upward
b) it affects the moon
c) it pulls objects downward
d) it is a type of attraction force.

40- All the following are properties of magnetism, except…………………

a) it is an invisible force.
b) it happens only between two touched objects.
c) it may be pushing or pulling force.
d) it may push another magnet away.

41- When a basketball falls down from a height, it is affected by…………

a) air resistance
b) gravity
c) air resistance and friction force
d) a and b

42- The Earth rotates around itself once every ……………..….

a) 24 hours b) 365 days c) 365 hours d) 24 days

43- The Earth's axis is ……………..…….

a) real vertical
b) imaginary horizontal
c) real horizontal
d) imaginary vertical

44- The Earth rotates ……………… on its axis.

a) clock wise
b) from north to south
c) counterclockwise
d) from south to north

45- The Sun appears in the ……………..… during the early morning.

a) east b) west c) north d) south

46- Rotation of Earth on its axis causes all the following phenomena, except ....

a) movement of the Sun from east to west.
b) movement of stars in the sky at night.
c) some stars seem to rise and set like the Sun.
d) occurrence of four seasons.

47-. In the middle of the day (at noon) we can see the Sun in ……. of the sky.

a) the left side
b) the right side
c) above in the center
d) the west direction

48-. The shortest shadow of an object happens ....

a) in morning
b) in afternoon
c) at noon
d) at night

49-. The Sun forms longer shadow of object ....

a) in morning
b) in afternoon
c) at noon
d) a and b

50-. The position of the Sun in the sky affects ……..………and …………….. of shadows of objects.

a) lengths and speed
b) angles and time
c) lengths and angles
d) speed and time

51-. We can't send astronauts to study stars because they are …….

a) so cold
b) faraway
c) too small
d) too large

52-. Constellations appear ………….……….. in the sky during the year.

a) at different positions
b) at the same position
c) in winter only
d) in summer only

53-. All the following appear like small light dots in the sky at night, except……………….

a) a satellite
b) the moon
c) a star
d) a meteor

54-. When the Earth is between the moon and the Sun, the moon appears in the .... phase.

a) half moon
b) full moon
c) new moon
d) crescent

55-……………….. is the moon phase at which the edge of the moon's face appears as an illuminated.

a) Crescent
b) Quarter
c) Gibbous
d) New moon

Complete the following sentences:

1- The system that includes all living organisms such as animals and plants is called biosphere.
2- The groundwater found in soil and rocks is an example of interaction between hydrosphere and geosphere.
3- Formation of lakes is an example of an interaction between hydrosphere and geosphere.
4- Water is responsible for weathering process and erosion process of rocks.
5- Weathering of rocks as a result of the effect of rains is an example of an interaction between hydrosphere and geosphere.
6- By heating of water it changes from liquid state to gas state.
7- During the water cycle in nature, water evaporates forming clouds, then it returns back to the Earth's surface during rain.
8- Fresh water forms some water bodies such as rivers and some lakes, while seas and oceans are formed of salt water.
9- Fresh water forms about 3.5 % of water on Earth, while salt water forms about 96.5 % of water.
10- Catfish live in fresh water, while dolphins live in salt water.
11- Most lakes have fresh water, while some other lakes have salt water.
12- Aquatic ecosystems can be classified into freshwater ecosystem and saltwater ecosystem.
13- Some types of worms live at the bottom of ponds.
14- According to water movement, ponds have still water compared to streams that have running water.
15- Water makes about two-thirds of human body.
16- In High Dam, water is used to generate electricity.
17- We must take a quick shower to conserve water.
18- The floor of oceans may contain mountains and plateaus.
19- Groundwater is replaced by rains.
20- The extinction of some species that live in fresh water is due to the poor quality of fresh water.

21- When the rate of rainfall decreases, the level of water in rivers will decrease causing drought.

22- A farm that is found near a tributary may cause water pollution if this farm is using chemical fertilizers.

23- Clothes can be made from animal products or plant products.

24- Water filters are used to remove waste materials from polluted water.

25- Wastewater engineers can test the quality of water by checking for the amount of pollutants in water.

26- The object at rest needs force to move.

27- Object changes its position, this object is in a state of motion.

28- The force that is needed to move a small bike is smaller than that needed to move a truck.

29- The force of magnetism may pull objects towards the magnet or push objects away from it.

30- The direction of friction force opposes the direction of a body moves through air.

31- Gravity pulls objects toward the center of Earth.

32- Anybody that has a mass must have gravity.

33- When the distance between the moon and the Earth increases, the gravitational attraction between them decreases.

34- If the mass of the moon increases than its real mass, its gravitational attraction will increase.

35- The gravity of Earth is greater than that of the moon because the Earth has larger mass.

36- A parachute in air is affected by air resistance that acts against the gravity of Earth.

37- The Earth revolves around the Sun in a fixed orbit that has an oval shape.

38- Day and night phenomenon occurs due to the rotation of Earth around its axis.

39- When half of Earth faces the Sun so, it has day, and the other half has night.

40- The Sun appears as it moves from east to west.
41- The solar system consists of one star and eight planets.
42- Formation of shadow of objects is due to movement of sun across the sky.
43- Every night, we can see new stars appear from east direction.
44- The Sun and other stars are made up of hot gases.
45- A constellation consists of a group of stars that form a pattern.
46- Ancient Greeks gave constellation Orion its name relative to a mythical hunter.
47- Planets and moon can't make their own light.
48- Location of constellations in the sky during the year helps us to determine the main directions of Earth.
49- The moon orbits Earth and both of them orbit the sun.
50- The Sun is a star that gives out a very big amount of light and heat.
51- Through the month, we can see different phases of the moon in the sky.
52- Full moon is the moon phase at which moon seems completely bright, while new moon is the moon phase at which moon seems completely dark.
53- Planetarium directors are scientists responsible for making amazing realistic show to bring the outer space to Earth.

Write the scientific term:

1- The system (sphere) that includes fresh water and salt water. (Hydrosphere)
2- The system of Earth which contains all different landforms. (Geosphere)
3- The large sheet of ice or snow that moves slowly over Earth's surface. (Glacier)
4- The Earth's system which consists of a mixture of gases surrounding Earth. (Atmosphere)
5- A cycle shows the continuous movement of water from the Earth to the atmosphere then to the Earth again. (Water cycle)

6- The energy which plays an important role in water cycle in nature. (solar energy)

7- The process in which the small particles of rocks are transported from a place to another. (Erosion process)

8- A large area of the world that has similar soil, climate, plants and animals. (Biome)

9- The area along the coast that disappears at the high tide and appears at the low tide. (Intertidal zones)

10- The largest saltwater ecosystems that cover large parts of Earth's surface. (Oceans)

11- The basic liquid matter which is needed by humans, animals and plants to survive. (Water)

12- A type of water which is suitable for drinking. (Freshwater)

13- It is an area of land where all the water flows to a common location usually an ocean, a sea or other large water body. (Watershed)

14- They are small water bodies such as small creeks or streams that flow into bigger rivers. (Tributaries)

15- A building established across a river which can hold water behind it. (Dam)

16- Scientists who work on recycling water in water treatment plants. (Wastewater engineers)

17- The effect that pull or push an object to make it move. (Force)

18- The force by which metals are attracted or pulled to a magnet. (Magnetism)

19- A type of friction force that opposes the movement of an object as it passes through air. (Air resistance)

20- A force that pulls object down toward the ground. (Gravity)

21- A celestial body that orbits the Earth. (Moon)

22- Celestial bodies that revolve around the Sun in fixed paths. (Planets)

23- A phenomenon takes place in oceans and seas due to gravity of moon. (Ocean tides)

24- The law which states that the force of gravity is constant and acts on all objects in the same way. (Law of motion)

25- It is an imaginary line that passes through the Earth's two poles. (Earth's axis)

26- The spinning of Earth on its axis. (Earth's rotation)

27- The orbiting of Earth around the Sun. (Earth's revolution)

28- The phenomenon that occurs when half of the Earth is facing the Sun. (Day)

29- The phenomenon that occurs when half of the Earth doesn't receive sunlight. (Night)

30- The center of the solar system. (The sun)

31- The first time piece that is used by ancient Egyptians to know the time. (Sundial)

32- The group of stars that make a certain shape in the sky. (Constellation)

33- They are giant spheres of superhot gases. (Stars)

34- A special building with dome ceiling, and is used to see images of celestial bodies. (Planetarium)

Put (√) or (x):

1) Earth's systems don't interact with each other. (x)
2) When wind carries seeds of some plants to new places, an interaction between atmosphere and biosphere can be observed. (√)
3) Rainwater is the only reason for weathering and erosion of rocks on the Earth's surface. (x)
4) Water is important for growing of living organisms. (√)
5) Deserts and forests are examples of biomes. (√)
6) Water evaporates from the surface of a lake will move from atmosphere to hydrosphere. (x)
7) If there is no hydrosphere, the biosphere will not exist. (√)
8) Water on the Earth is divided into fresh water and salt water. (√)
9) The amount of fresh water on Earth is more than that of salt water. (x)

10) Most of the salt water on Earth is found in the form of frozen water. (x)
11) The total amount of water on Earth doesn't change. (√)
12) All animals and plants can live in aquatic habitats. (x)
13) Some ponds and lakes may dry up in winter months. (x)
14) Without water, all forms of life will disappear. (√)
15) There are no living organisms live in the hydrosphere. (x)
16) When the amount of water decreases or water get polluted, biosphere will be affected. (√)
17) A river always flows from an area of low place to an area with higher place. (x)
18) Wells and springs obtain their water from aquifers. (√)
19) The amount of salt water on the Earth is smaller than the amount of fresh water. (x)
20) Some animals and plants live in water. (√)
21) The place where two oceans meet is called an estuary. (x)
22) Rivers and streams are freshwater moving bodies. (√)
23) Turning off the water tap, while washing your hair is from the ways to conserve water. (√)
24) We can drink the water of seas. (x)
25) Rivers often start in mountains in the form of estuaries. (x)
26) Assal lake is surrounded by land and it is a low-lying area. (√)
27) The type of water in lakes is salt water only. (x)
28) Upstream is the place where a river starts. (√)
29) Preservation and sustainability are ways to conserve natural resources. (√)
30) Placing many cows in small grass areas is considered as unsustainable situation. (√)
31) Recycling of wastewater means removing waste materials from it. (√)
32) Water is considered as a nonrenewable natural resource. (x)
33) Adding some of mud to clear water can pollute it. (√)

34) Wastewater engineers decide where to build water treatment plants. (√)

35) Force is the reason of motion of any body. (√)

36) Magnet must touch objects to attract them. (x)

37) The force of magnet is always attraction force only. (x)

38) Force of gravity can be seen easily, but we cannot see its effects. (x)

39) Objects are pushed away of each other due to gravity. (x)

40) Gravity affects the movement of objects. (√)

41) If two objects don't touch each other, there is no gravity between them. (x)

42) Small planets have bigger gravity than big planets. (x)

43) All planets of the solar system rotate around the Sun in one orbit only. (x)

44) Skydiving sport depends on gravity and air resistance. (√)

45) Gravity is similar to magnetism because both of them have only pulling force. (x)

46) Gravity affects only on the moving objects but doesn't affect the objects at rest. (x)

47) Gravity is the force that holds all objects in their places. (√)

48) The direction and mass of an object are changed due to gravity. (x)

49) If there is no air resistance on Earth, all objects will reach the Earth's surface at the same moment when dropping them from the same height. (√)

50) Heavier objects reach Earth's surface before smaller objects due to the effect of air resistance. (√)

51) There is no air in space, so air resistance slows down the movement of objects through space. (x)

52) The orbit of each planet has an ellipse shape. (√)

53) The Earth revolves around the Sun once every 24 hours. (x)

54) All parts of Earth receive sunlight at the same time. (x)

55) If you change your direction on Earth's surface, the Sun will rise from west. (x)

56) The Sun rises in the east and sets in the west. (√)

57) Most of stars don't appear moving in the sky. (x)

58) Earth revolves around the Sun in a fixed path. (√)

59) We can feel the movement of Earth easily. (x)

60) All objects on Earth's surface move with the same speed of Earth. (√)

61) The Sun appears in the same place in the sky all the day. (x)

62) Planets of the solar system rotate on their axes with different speeds. (√)

63) The position of the shadow of Cairo Tower will not change during the day. (x)

64) The Sun is the biggest star in the universe. (x)

65) All celestial bodies make their own light. (x)

66) The Sun is a medium sized star. (√)

67) The Sun seems smaller, because it is much farther from Earth than other stars. (x)

68) Superhot gases of the Sun burn producing heat and light energy. (√)

69) Constellations have similar shapes in the sky. (x)

70) The moon seems shiny because it absorbs sunlight. (x)

71) The moon has only one phase during the lunar month. (x)

72) At crescent phase, a part of the moon edge appears bright. (√)

73) The Sun is bigger than the moon. (√)

74) The atmosphere let all light waves to pass to the Earth. (x)

75) Planetarium has a projector to display pictures on its ceiling. (√)

Correct the underlined words:

1- The system that includes rocks and heavy metals is called <u>hydrosphere</u>. (geosphere)

2- Rainwater is a part of <u>biosphere</u>. (hydrosphere)

3- Presence of dolphins in oceans represents an interaction between hydrosphere and <u>geosphere</u>. (biosphere)

4- A spring flows out from a rock is an example of an interaction between hydrosphere and <u>atmosphere</u>. (geosphere)

5- Water can change into water vapor in extreme <u>cold</u> weather. (hot)

6- A rat that digs a barrow in the soil is an example of the interaction between biosphere and <u>atmosphere</u>. (geosphere)

7- <u>Shallow</u> areas of oceans don't receive sunlight. (Abyssal)

8- <u>Abyssal</u> areas of oceans contain coral reefs and intertidal zones. (Shallow)

9- Some animals live in <u>bonds</u> such as catfish, and trout. (streams)

10- <u>High</u> quality of fresh water leads to the death of marine organisms live in it. (poor)

11- Planets in the solar system revolve in fixed orbits due to the <u>friction</u> between the Sun and planets. (gravity)

12- The gravitational force of Earth to a person in a flying airplane is <u>greater</u> than it when the same person stands on the ground. (smaller)

13- The change of an object position is called <u>force</u>. (motion)

14- Magnetism is a kind of <u>visible</u> force. (invisible)

15- Air resistance is a type of <u>pulling</u> force. (pushing)

16- <u>Gravity</u> is attraction or repulsion force between two magnets or between the magnet and an object. (Magnetism)

17- <u>Magnetism</u> is the force of attraction that changes the direction of a moving object in air towards the ground. (Gravity)

18- All objects on Earth's surface is affected by <u>repulsion</u> force of gravity. (attraction)

19- Any object has gravity depending on its <u>length</u>. (mass)

20- Air resistance <u>speeds up</u> the object as it falls. (slows)

21- The <u>Earth</u>'s gravity keeps all planets in their orbits. (sun)

22- Gravity is the attraction or pulling force that keeps all <u>stars</u> in their orbits around the Sun. (planets)

23- The Earth orbits the Sun in <u>a rectangular</u> path. (an oval)

24- The time taken by Earth to complete one rotation on its axis is called <u>year</u>. (day)

25- The Earth's axis is <u>a real</u> line passes through Earth's poles. (an imaginary)

26- Earth rotates on its axis at <u>low</u> speed. (high)

27- At the beginning of the day, the Sun appears in the <u>west</u> direction. (east)

28- <u>In the early morning</u>, the Sun would be above you in the center of the sky. (At noon)

29- <u>Planets</u> are celestial bodies that make their own light. (Stars)

30- Constellations have <u>similar</u> shapes in the sky. (different)

31- Stars are made up of hot <u>liquids</u>. (gases)

32- The moon takes one lunar <u>year</u> to complete one cycle around the Earth. (month)

33- At the <u>gibbous</u> phase, one edge only appears bright. (crescent)

Give reasons for:

1- Water can affect nonliving things like rocks.

- Because water is responsible for weathering and erosion processes of rocks.

2- Hiding of worms inside the soil is an example of an interaction between two Earth's spheres.

- Because worms belong to biosphere, while soil belongs to geosphere.

3- Importance of atmosphere for plants in making their food.

- Because plants absorb carbon dioxide from air to make their food by photosynthesis.

4- Water is important for all plants on Earth.

- Because plants depend on water to make photosynthesis and grow and some plants live in water.

5- Our planet looks like a blue marble from the space.

- Because nearly three quarters (more than 71 %) of Earth is covered by water.

6- More than 50% of known living organisms live in the aquatic environments.

- **Because more than 71 % of Earth is covered by water.**

7- Most of the fresh water on Earth can't be used for drinking.

- **Because most of fresh water on Earth found in the form of frozen water.**

8- Not every water source is used as drinking water.

- **Because humans can’t drink salt water.**

9- Water that forms the hydrosphere is one of the renewable resources on Earth.

- **Because it can be replaced through water cycle.**

10- No green plants can survive in the abyssal zones of oceans.

- **Because the abyssal zones don’t receive sunlight.**

11- We must conserve fresh water.

- **Because there is a limited amount of freshwater on Earth.**

12- You should turn off water tap during brushing your teeth.

- **To conserve fresh water.**

13- Groundwater is called by this name.

- **Because it is stored in the cracks and spaces of underground rocks.**

14- Farms near tributaries may cause water pollution.

- **Due to using of chemical fertilizers.**

15- Countries prevent using or developing natural resources in some protected areas of land.

- **To preserve natural resources.**

16- Paper clips (or iron nails) are pulled toward the magnet.

- **Due to the force of magnetism.**

17- When using the bicycle brake, the bicycle stops.

- **Due to the friction force between the brake and the tires.**

18- The ball changes its direction after we throw it upwards.

- **Due to the effect of Earth’s gravity that pulls objects downward.**

19- The moon is attracted to Earth.
(The moon stays in fixed orbit around Earth)

- **Due to the effect of Earth’s gravity.**

20- Gravity of Earth is greater than gravity of the moon.

- **Because the mass of Earth is greater than that of the moon.**

21- The astronauts float in space.

- **Due to the absence of gravity.**

22- The force of gravity has an important role in the solar system.

- **Because it keeps the planets revolve around the sun in fixed orbit.**

23- Planets revolve around the Sun in fixed orbits.

- **Due to the strongest gravity of the sun.**

24- Air resistance affects the movement of an object which falls from a height.

- **Because it slows down the movement of objects.**

25- Skydiver opens his parachute during landing.

- **To slow down his speed on landing due to air resistance.**

26- A pencil takes a longer time to reach Earth's surface than a large rock if they are thrown from the same height.

- **Because the pencil is affected by more air resistance.**

27- Occurrence of day and night.

- **Due to rotation of Earth on its axis.**

28- Half of Earth appears dark at night.

- **Because it doesn’t receive sunlight.**

29- Occurrence of the four seasons.

- **Due to revolution of Earth around the Sun.**

30- The Sun appears as it moves in the sky.
(In the night sky, some stars seem to rise and set like the Sun.)

- **Due to rotation of Earth on its axis.**

31- Although Earth rotates on its axis, we don't feel its movement.

- **Because we move with the same speed of Earth.**

32- The length of the shadow of an object changes throughout the day.

- **Due to the change in the position of the Sun in the sky.**

33- The sun is a star.

- **Because it made up of hot gases and gives out light.**

34- The Sun looks much larger to us than other stars.

- **Because it is the closest star to Earth.**

35- The moon appears bright in the sky at night.

➢ Because it reflects sunlight.

36- Earth and the moon are not considered stars.

➢ Because they can't make their own light.

37- The moon has different phases in the night sky.

➢ Because the moon orbits Earth and both of them orbit the sun.

38- Atmosphere limits the using of some telescopes to see distant celestial bodies.

➢ Because it allows some light waves to pass and block the others

What happens if:

1- People don't conserve fresh water.

➢ The amount of freshwater on Earth will decrease.

2- Fresh water of a river when it meets the salt water of a sea.

➢ Estuary is formed.

3- Water is collected in a low-lying area.

➢ A lake is formed.

4- The quality of fresh water becomes poor.

➢ It may causes death and extinction of living organisms.

5- The rate of rainfall increases on a river.

➢ The level of water in river will increase causing flooding.

6- A trash dump is established near a tributary that is connected with a river.

➢ It will cause water pollution.

7- You mix clear water with small amount of mud.

➢ It will become polluted water.

8- Skydiver opens his parachute during landing.

➢ His speed will decrease gradually.

9- The mass of the moon decreases to half.

➢ The gravity of the moon will decrease.

10- There is no gravity on Earth.
- All objects on Earth will float off into space.

11- The gravity of Earth is a repulsion force not an attraction force.
- All objects will move upward away from Earth's surface.

12- If the gravity between Earth and the moon disappears.
- The moon will float off into space.

13- The gravity of the Sun disappears.
- Planets will float off into space randomly.

14- A metal ball and a feather are fallen down from a tower.
- The metal ball will reach the ground first.

15- You throw two iron balls have the same mass from the same height.
- They will reach the ground at the same time.

16- There is no resistance and two objects with different masses are thrown from the same height.
- They will reach the ground at the same time.

17- Earth doesn't rotate on its axis.
(Earth stops spinning on its axis.)
- The cycle of day and night will not happen.

18- Half of Earth faces the sun.
- This part has a day.

19- Earth doesn't revolve around the sun.
- The cycle of seasons will not happen.

20- The shadow of an object if the Sun locates at east or west in the sky.
- The shadow of object will be longer.

21- Stars are not made up of hot gases.
- They can't make their own light.

22- The Earth is located between the moon and the Sun.
- Full moon phase occurs where it appears completely bright.

Choose from column (B) what suits it in column (A)

1)

Column A	Column B
1) The word "Geo" refers to	a) water
2) The word "Hydro" refers to	b) Earth
3) The word "Atmos" refers to	c) life
4) The word "bio" refers to	d) vapor

1	2	3	4
b	a	d	c

2)

Column A	Column B
1) Oceans	a) contain fresh water or salt water
2) Lakes	b) contain salt water only.
3) Rivers	c) contain mixture of fresh water and salt water.
4) Estuary	d) contain fresh water only.
5) Groundwater	e) is the water found between pores of rocks below Earth's surface.

1	2	3	4	5
b	a	d	c	e

3)

Column A	Column B
1) A water body that often starts in the mountain as a stream.	a) Estuary
2) It is formed when a river meets a sea.	b) River
3) The large water body that is surrounded by land and formed when water collects in low-lying areas.	c) Wetland
4) The water bodies that surround the continents	d) Lake
5) It is a land area which is partially covered with water.	e) Oceans

1	2	3	4	5
b	a	d	e	c

4)

Column A	Column B
1) Trees	a) Can be used in making plastic.
2) Sustainability	b) Can be used in making paper.
3) Oil products	c) Can be used in making clothes.
4) Cotton	d) The action of control reaching of humans to the natural resources or using them.
5) Preservation	e) Using resources in a way that doesn't negatively affect the future supply of these resources.

1	2	3	4	5
b	e	a	c	d

5)

Column A	Column B
1) The force that arises between two objects when they touch each other.	a) Gravity
2) The force acts on all objects on Earth.	b) Contact force
3) The force between two objects that don't touch each other.	c) Friction force
4) The force opposes and slows down the movement of an object.	d) Non contact force

1	2	3	4
b	a	d	c

6)

Column A	Column B
1) Jupiter	a) is the path in which planets revolve around the Sun
2) Earth	b) is the fastest planet that rotates on its axis.
3) Orbit	c) Consists of sun and planets.
4) Solar system	d) is the planet that completes one cycle on its axis in 24 hours.
5) Cycle	e) The series of events that is repeated in the same order.

1	2	3	4	5
b	d	a	c	e

7)

Column A	Column B
1) Scientists who study the properties and behavior of celestial bodies in the space.	a) Galaxy
2) Tools help scientists to see distant objects in space with more details.	b) Atmosphere
3) A group of stars, planets and gases held together by gravity.	c) Planetarium directors
4) The wide space that contains celestial bodies as stars, galaxies, comets and meteors.	d) Galileo binoculars and Hubble space telescope
5) A protective layer around Earth that allows some light waves to pass and block the others.	e) The Universe

1	2	3	4	5
c	d	a	e	b

Cross out the odd words:

1- Water – carbon dioxide – oxygen – nitrogen.

2- Oceans – Rivers – Rocks– Lakes.

3- Ponds – rivers – rains – oceans.

4- Gulfs – seas – oceans – rivers.

5- Kelp – starfish – Moses fish – Frogs.

6- Gravity – Sun – Friction force – Magnetism.

7- Earth – Jupiter – The Sun – The moon.

8- Crescent – Full moon – Shadow – Gibbous.

المراجعة رقم (5)

الترم الثانى







Give the reason.

1- Water is important for all plants on the Earth.
   Because all plants need water to grow and survive
2- Water can affect nonliving things like rocks.
   Because water can cause weathering and erosion of rocks
3- Our planet looks like a blue marble from space.
   Because around 71% of Earth are covered by water
4- Water that forms the hydrosphere is one of the renewable resources on Earth.
   Because water can be replaced in nature through the water cycle
5- Hiding of worms inside the soil is an example of interaction between two Earth's spheres.
   Because worms belong to biosphere while soil belong to geosphere
6- Importance of atmosphere for plants for making their food
   Because plants take in carbon dioxide gas from air during photosynthesis process
7- Most of the fresh water on Earth cannot be used for drinking.
   Because most of the fresh water on Earth are in the form of frozen water
8- Some ponds and lakes may dry up during some months.
   Because of the hot months in summer that makes water evaporates fast

9- No green plants can survive in the abyssal zones of oceans.
Because sun light doesn't reach abyssal zones which is important for the plants to make their food

10- We must conserve fresh water.
Because the amount of fresh water on Earth is limited

11- You should turn off the water tap during brushing your teeth.
To conserve fresh water

12- Ground water is called by this name.
Because it is stored in the cracks and spaces of underground rocks

13- The quality of fresh water affects the life of living organisms living in it.
Because poor quality of freshwater leads to the death of many living organisms and the extinction of some species live in water

14- Scientists recycle fresh wastewater to get filtered water again.
Because fresh water is limited and very important for living organisms

15- Farms near tributaries may cause water pollution
Due to using of chemical fertilizers that cause water pollution

16- Countries prevent using or developing natural resources in some protected areas of land
To preserve natural resources

17- Wastewater engineers test the treated water
To make sure it is safe before it is used by humans

18- The moon is attracted to Earth.
Due to the gravitational force between them

19- The gravity between two objects is affected by the distance between them
Because when distance between them decreases, the gravity increases and vice versa

20- The force of gravity has an important role in the solar system.
Because gravity between sun and planets keeps the planets revolve in fixed orbits

21- Paper clips are pulled toward the magnet.
Due to the force of magnetism

22- The ball changes its direction after we throw it upwards.
Because the gravity pulls it downward

23- Gravity of Earth is greater than gravity of the moon
Because the mass of Earth is greater than the mass of the moon

24- Skydiver opens his parachute during landing.
To slow down his speed on landing due to air resistance

25- When you press the bicycle brake, its speed will stop moving after a few seconds
Because the brake produces friction force that slows the movement until it stops

26- Some iron nails are attracted to a magnet.
Due to the force of magnetism




27- Air resistance affects the movement of an object which falls from a height.
Because it slows it during falling

28- A paper sheet takes longer time to reach Earth's surface than a paper clip if they are thrown from the same height
Because the paper sheet has more surface area so it has more resistance and takes longer time than paper clip

29- Planets revolve around the sun in fixed orbits.
Because of the gravitational force between the sun and the planets

30- Occurrence of day and night
Because of the rotation of Earth on its axis

31- Half of Earth appears dark at night
Because it doesn't receive sunlight

32- The sun appears as it moves across the sky
Because of the rotation of Earth on its axis

33- Occurrence of seasons
Because of the revolution of the Earth around the sun

34- Although Earth rotates on its axis, we don't feel its movement
Because we are moving with the same speed of Earth

35- The length of the shadow of an object changes throughout the day
Because of the change of position of the sun in the sky




36- In the night sky, some stars seem to rise and set like the sun

Because of the rotation of Earth on its axis

37- The moon appears bright in the sky at night

Because it reflects the sunlight

38- If we are travelling in desert stars may help us to determine our correct way across the desert

Because the location of the constellations in the sky during the year help us to determine the main directions of Earth

39- The sun looks much larger to us than other stars

Because the sun is the closest star to the Earth

40- Atmosphere limits the using of some telescopes to see distant celestial bodies

Because atmosphere allows some light waves to pass to the Earth and blocks others

41- Stars appear bright at night

Because stars produce light

42- The moon has different phases in the sky

Due to

the Earth's revolution around the sun

The Moon revolution around the Earth

Both the Earth and moon revolution around the sun

43- Planetarium is an important building for space scientists

Because we can see images of stars, planets, constellation bodies and other objects in the space

What happens to/if?

1- The state of water when it is subjected to extreme cold weather.
It will be changed into solid state (ice)

2- Fresh water of a river when it meets the salt water of a sea.
An estuary is Formed.

3- Plants cannot get carbon dioxide gas from the air.
They will not make their own food through the photosynthesis process.

4- Animals that live in lakes if they dry up.
They have to adapt, or they will die.

5- People do not conserve fresh water.
The amount of fresh water will decrease.

6- Water is collected in low lying areas.
A lake is formed.

7- The quality of fresh water becomes poor.
Many living organisms will die or become extinct

8- The rate of rainfall increases on a river.
The level of water increases, and floods occur.

9- You mix clear water with a small amount of mud.
It will become dirty water.

10- If a trash dump is established near a tributary that is connected with a river
The litter of the trash dump will be blown into water of tributary then into river causing water pollution

11- The distance between the moon and Earth increases to twice
The gravitational force will be smaller.

12- The mass of the moon decreases to half.
The gravity will decrease.

13- The mass of the moon becomes twice its real mass
The gravity increases so the moon comes closer to Earth and it might crash into Earth

14- The gravity of Earth is a repulsion force not attraction force
All objects wil move upward a way from the Earth's surface

15- There is no gravity on Earth.
All objects will float off into space.

16- Planets if the gravity of the sun disappears.
They will leave their orbits and float off into space

17- The speed of skydiver if he opens his parachutes during landing
The speed decreases gradually

18- The gravity pulling force between two bodies when their masses decreases
The gravity will decrease.

19- A metal ball and a feather are fallen down from a tower.
The metal ball will reach the ground first.

20- You throw two iron balls have the same mass from the same height
They will reach the ground at the same time.




21- There is no air resistance and two objects with different masses are thrown from the same height

They will reach the ground at the same time.

22- Earth does not rotate on its axis.

Day and night will not occur

23- Half of Earth faces the sun.

This half has day.

24- Earth completes its spinning on its axis in 12 hours only.

Day and night occur in 12 hours

25- The length of the shadow of an object at noon

It will be the shortest shadow of the object

26- The shadow of an object if the sun locates at east or west in the sky.

The shadow of the object will be the longest

27- Stars are not made up of hot gases

Stars cannot make their own light

28- Sunlight falls on the moon's surface

The moon seems bright

29- The gravity of the sun if its mass decreases than it is now

The gravity of the sun will decrease

30- Half of the moon faces the sun

This half will appear bright

31- If the moon completes one revolution around the Earth

The phases of the moon are formed





32- If two planets have the same size make one cycle on their axis at the same speed

The day and night of both will be the same



كيفية طباعة صفحات معينة من ملف معين

مثلا ازاى نطبع الصفحات من صفحة 4 الى صفحة 9



خطوة 1

خطوة 2
اختيار اسم الطابعة بتاعتك

خطوة 3
كتابة الصفحات المراد طباعتها
نكتب رقم 4 ثم نكتب الشرطة دي - ثم نكتب 9

خطوة 4
اختيار نوع الورق

خطوة 5
اختيار A4

خطوة 6